



Radiological and Nuclear Adversary Project

*Task 3: Terrorist Nuclear Command
and Control*

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National Consortium for the Study of Terrorism and Responses to Terrorism
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About START

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About the Project and Citations

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Executive Summary

Suddenly aware of terrorist possession of a nuclear weapon, conventional wisdom assumes that US decision makers would immediately use overwhelming preemptive force against both the group's leadership and its nuclear device. Similarly, it is widely understood that if a terrorist group detonated a nuclear weapon on US soil or its interests abroad, an overwhelming response would follow, targeting the group's leadership and remaining nuclear devices, if any. The conventional wisdom described above—axiomatic preemption and retaliation—could easily result in the opposite outcome from that which decision makers seek: actual use of a nuclear weapon by terrorists. Preemption or retaliation could *still* result in one or more nuclear devices being employed against the United States.

This counterintuitive outcome is dependent on how the group configures its nuclear command and control (C2). One must assess if a given terrorist group will employ, with regard to nuclear weapons, an *authoritative* or *delegative* command and control system. The former—where the decision to employ nuclear weapons is retained solely by a top leader(s)—allows the United States “decapitation” options against leadership centers to prevent or respond to an attack. In contrast, a delegative system—an arrangement in which subordinate commanders are authorized to make nuclear employment decisions under certain defined circumstances—occludes decapitation opportunities; attempts to destroy a terrorist group's top leadership, even if successful, might trigger the nuclear attack they were intended to neutralize. The implication is that, in the lead-up to a preemptive strike on a nuclear-armed terrorist group or in the immediate aftermath of an attempted or successful nuclear strike on the United States or its interests abroad, US leadership's calculations about the authoritative or delegative nuclear command and control system employed by terrorists and other violent non-state actors (VNSAs) will be of supreme importance.

Unfortunately, to date, little attention has been given to how a terrorist would implement C2 over a single nuclear weapon (or a nascent nuclear arsenal) or what their likely nuclear weapons employment policies would be. By limiting themselves to investigating only the general requirements necessary to attain a nuclear capability, contemporary scholars studying the nexus between terrorists and nuclear weapons would be remiss in assuming that information pertaining to the *capability* to fabricate or obtain nuclear weapons tells us something about the manner of *employment* of that weapon. In short, most present perceptions of the possible marriage between terrorists hostile to the United States and nuclear weapons foresee an immediate effort to use such devices against population centers within the United States; preemption or retaliation by the US is assumed. Such a myopic view ignores the very real possibility that nuclear-armed terrorists, utilizing complex and effective nuclear command and control configurations, could still succeed in using nuclear weapons against the United States or its interests abroad.

This project challenges these assumptions and seeks to develop a more nuanced understanding of how a variety of VNSAs would likely approach and actualize the command, control and employment of nuclear weapons. Ultimately, it creates a functional model that acts, with proper data input, as a tool for determining the likely command and control configuration of any VNSA—extant or nascent.

Construction of such a model and tool involved a multi-method approach that necessitated identifying the various elements influencing command and control in its a variety of manifestations. The first step was to conduct an exhaustive survey and analysis of relevant literature from three separate domains:

- First, findings from the disciplines of social and organizational psychology revealed important clues about the universal variables inherent in how organizations are structured and maintained. Of specific concern was how dominion and delegation—the extension of authority over distance—are balanced in complex and critical human interactions.

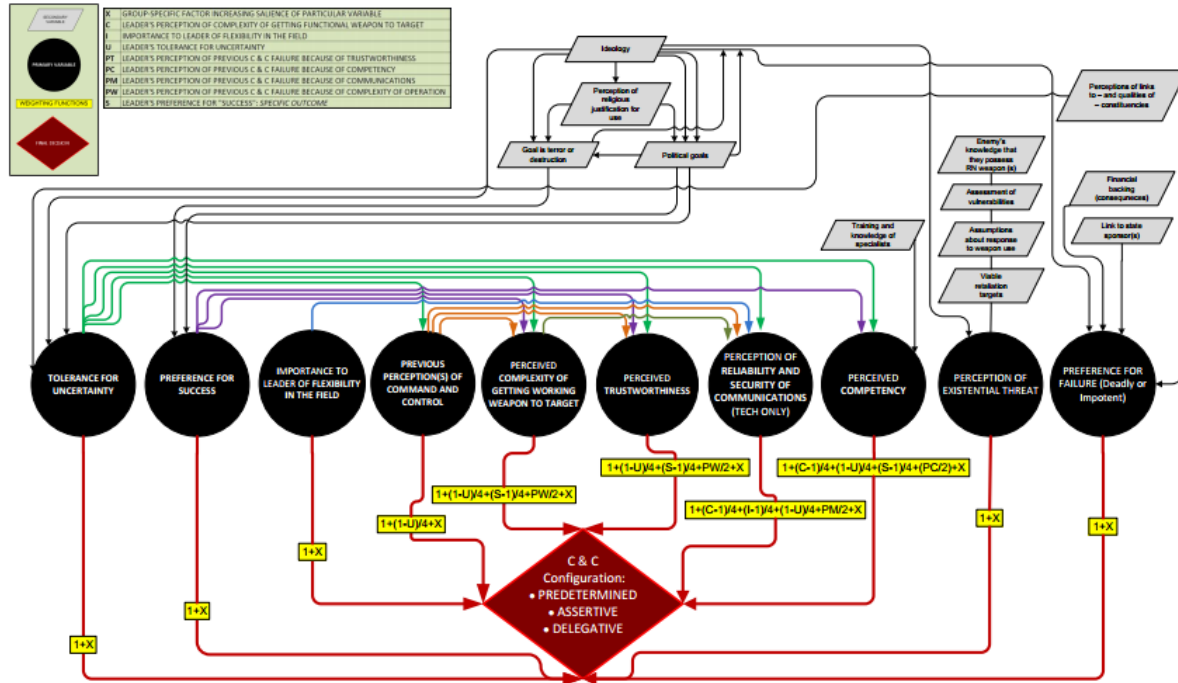
- Second, researchers studied states' perception of optimal nuclear command and control configurations as well as their actual manifestation from the closing salvos of World War II through the Cold War. This part of the literature assessment identified specific variables influencing known and implied configurations relating directly to nuclear weapons.
- Third, researchers reviewed VNSA command and control configurations demonstrated during actual attacks. Several incidents were carefully selected to account for command and control configurations in a variety of complex operations involving a spectrum of group traits and attack environments.

In sum, all three elements of the literature assessments informed the development of an initial set of potential contributing factors with respect to VNSA nuclear command and control. However, despite the breadth of this analysis, it still presented a static, and perhaps occasionally even outdated, view of what are undoubtedly highly dynamic actors and environments.

The second method employed was therefore to augment the analysis of existing knowledge with a structured elicitation of recognized subject matter experts (SMEs), in order to provide more dynamic insights and innovative connections between the plentitude of variables informing the model. The elicitation had as its primary goal to validate and, where necessary, supplement the previously developed set of variables potentially influencing nuclear command and control, by drawing on the collective expertise of the assembled experts, while at the same time controlling insofar as possible for the biases that attend any judgmental analysis. SMEs were drawn from a variety of professions and academic disciplines. Appropriate techniques were selected and designed to fit the needs of the project, including cognitive structuring (debiasing techniques), structured and semi-structured brainstorming session, red teaming, and micro- and macro-model development and subsequent evaluation. Ultimately, the project team extracted a vast number of variables and several models for use in informing the previously developed C2 framework.

The resulting integrated framework was then utilized by the project team to produce a model and assessment tool that anticipates the nuclear C2 configuration of a VNSA. The integrated framework itself, which contained over fifty variables, was clearly too complex and unwieldy for practical analysis, so the first step in constructing the final model was for researchers to consider all the variables and assess their salience and relationship to the ultimate command control configuration. Moreover, going beyond the "assertive" and "delegative" options identified in the literature, researchers also allowed for "predetermined" configurations (a system in which the personnel responsible for transport, operational security and detonation of the weapon must strictly adhere to prearranged operational behavior *regardless* of events that transpire in the field). Eventually, after several iterations, ten primary and several dozen secondary factors were identified and incorporated into the final model (see Figure I or [click here](#) for a higher resolution online version). The model can be used to assist analysts by allowing them to input known data about groups into a structured profile, and produce either a confirmation of their qualitative analysis, or, if necessary, alter their data collection methods or inform them of a methodological oversight.

Figure I: VNSA Nuclear C2 Model



All of these factors and related considerations captured in the final model were then converted into a set of clear instructions for constructing profiles on known or notional terrorist groups. This entire process was applied to six groups by analysts with subject matter expertise in the specific group or group-type selected. The profiled groups were evenly split between groups previously identified as posing a significant nuclear threat and semi-fictitious groups, including al Qaida Senior Leadership, al Qaida US Cell (semi-fictitious), al Qaida in the Arabian Peninsula, Apocalyptic Millenarian Group (semi-fictitious), TTP (Tehrik-e-Taliban Pakistan), and a US Right-Wing Extremist Militia (semi-fictitious). After completing each profile but prior to any scoring, the analyst made a qualitative estimation of the group's nuclear command and control configuration. The profile inputs for the ten primary factors were then run computationally run through the model, and the result compared to the expert's estimation. The results are shown in the table below:

Table I: Final Model

FACTOR VALUES: WEIGHED MODEL AND SIX VNSA							
FACTOR NUMBER	FACTOR ¹	AQSL	AQ Cell	AQAP	AM	TTP	RW
F1	Tolerance for Uncertainty	Low	Medium (more important)	High (more important)	Low (more important)	Low	Medium
F2	Preference of Success	Specific outcome	Suboptimal Outcome: Even fizzle	Suboptimal: Target/Timing	Specific outcome (more important)	Suboptimal outcome: Target/timing	Suboptimal outcome: Target/Timing
F3	Flexibility in the Field	Low	Low	Low	Low (more important)	Medium	High
F4	Previous C2 ²	P: Success A: Indeterminate D: Failure	P: Indeterminate A: Success D: Failure	P: Indeterminate A: Indeterminate D: Indeterminate	P: Indeterminate A: Success D: Indeterminate	P: Indeterminate A: Success D: Indeterminate	P: Indeterminate A: success D: Success
F5	Complexity of Targeting*	High	High	High	High	High	Low
F6	Trustworthiness*	Low	High	Medium-Low	Low (more important?)	Low	Medium
F7	Communications*	Low	Medium	High	Low	Low	High
F8	Group Competency*	Low	Medium	High	High (more important)	High	High
F9	Existential Threat*	Medium	High	High	High (more important)	Low	High
F10	Preference for Failure	Deadly	Deadly	Deadly	Deadly	Deadly	Deadly
		OUTCOME:	OUTCOME:	OUTCOME:	OUTCOME:	OUTCOME:	OUTCOME:
Groups:		Al Qaida Senior Leadership	Al Qaida U.S. Cell [*]	Al-Qaida in the Arabian Peninsula	Apocalyptic Millenarian Cult [*]	TTP: Tehrik-e-Taliban Pakistan	U.S. Right-Wing Extremist ³
Author's Estimation:		Predetermined	Assertive	Predetermined / Delegative	Predetermined	Assertive	Delegative
Model (Unweighted):		Predetermined	Predetermined	Delegative (but close to others)	Predetermined	Assertive	Delegative
Model (Weighted):		Predetermined	Predetermined	Delegative	Predetermined	Predetermined (but close to Assertive)	Delegative

¹ Factors with a * symbol indicate that leadership's *perception* of particular factor is paramount

² Leadership's perception of outcomes to previous C2 configurations – whether it be their group, other groups or a general perception. Perceptions are of predetermined, assertive and delegative configurations.

³ Semi-Fictitious U.S. Right-Wing Anti-Government Extremist.

^{*} Groups with a * symbol are notional yet based on extant and past groups, individuals and events.

It should be noted that, where discrepancies between the model and the experts exist, this does not necessarily imply that the model is incorrect – the model may in fact be detecting and taking into account factors missed by the experts. So, while it is, fortunately, impossible to validate the model empirically in light of the absence of any actual cases of VNSA acquisition of nuclear weapons, the general concordance of the model with expert estimates gives some *prima facie* or surface validity to the model and justifies using it as the basis for future research in this area. The profiles also provide, to the best of the researchers' knowledge, the first in-depth exploration of command and control issues for several of the VNSAs and thus might be useful in and of themselves in analyzing the potential future behavior of these VNSAs in even a non-nuclear context.

Although this study is only an initial foray into resolving the central questions posed by this study, it constitutes a significant and practical step forward in understanding how VNSAs might configure their nuclear weapons C2 at an operational level. It is genuinely hoped that the US is never faced with a nuclear-armed non-state adversary, but if this eventuality were to arise, the VNSA Nuclear C2 Model and assessment tool developed here, together with the analysis of past VNSA C2 behavior and state nuclear weapons employment policies, may provide security officials and policymakers with much-needed insight in a time of unprecedented national crisis.

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Introduction

To date little, if any, attention has been given to how violent non-state actors (VNSAs) would implement command and control (C2) over a single nuclear weapon (or a nascent nuclear arsenal) or what their likely nuclear weapons employment policies (NUWEPs) would be. By limiting themselves to investigating only the general requirements necessary to attain a nuclear capability, contemporary scholars and analysts of the nexus between VNSAs and nuclear weapons bolster misguided assumptions that the *capability* to fabricate or obtain nuclear weapons tells us something about the manner of *employment* of that weapon. In short, most present perceptions of the possible marriage between VNSAs hostile to the United States and nuclear weapons foresee an immediate effort to use such devices against population centers within the United States, its territories or interests abroad or its allies. Such a myopic view ignores the crucial details of how VNSAs would maintain command and control over their nuclear weapons, an issue that would bedevil nuclear-armed VNSAs just as it would any other actor in possession of nuclear weapons.

Would the leaders of a nuclear-armed non-state group, fearful of their own “decapitation,” i.e. being cut-off from their nuclear weapons by US preemption or retaliation, predelegate nuclear storage, transportation and employment authority to widely dispersed subordinates? Or, in contrast, would the leaders of nuclear-armed VNSAs, mindful of internecine struggles and, consequently, fearful of being blackmailed or destroyed by their own weapons, limit the authority to store, move and employ their nuclear weapons only to themselves and, possibly, a small trusted coterie? Answers to such questions are of vital importance. For example, if the US preempted or retaliated against leadership centers of nuclear-armed non-state actors employing a predelegative command and control structure, the response could easily be (another) disastrous nuclear event against the US or its territories abroad. In contrast, if preempting or retaliating against terrorists using a nondelegative command and control system, the United States might safely eliminate nuclear threats from the group with attacks on leadership centers.

Utilizing multiple methodologies, this project addresses how a variety of VNSAs would likely approach and actualize the command, control and employment of nuclear weapons.¹ In so doing, it creates a functional model that acts, with proper data input, as a tool for determining the likely command and control configuration of any VNSA—extant or nascent.

As an initial step, the study explores the social sciences, specifically areas related to the study of organizations in general. Organizations are viewed through a variety of lenses, including organizational culture theory, psychology and organizations, organizational structures, and the issues of control within large organizations. This includes the role of functionalism and the roots of organizational studies, culture and organizations.

The next portion of the literature review is a robust examination of state nuclear command and control. The principle of assured destruction is assumed to be a part of the state’s nuclear posture. Having established that nuclear weapons carry with them an inherent problem, the “always/never dilemma” reveals how a state’s nuclear arsenal must always be reliable and secure while never being susceptible to destruction or unauthorized use. An evaluation of historical nuclear command and control provides guidelines as to the optimal balance between assertive control and delegation. In addition, central control and peripheral launch capability are weighed against each other.

The third portion of the literature survey approaches command and control from the perspective of violent, non-state actors (VNSA). In addition to the production of a detailed narrative that acquaints readers with discernible C2 traits exhibited by certain VNSAs and manifest in specific incidents, the section seeks to identify and explore independent variables believed to influence the structure of VNSA C2 configuration.

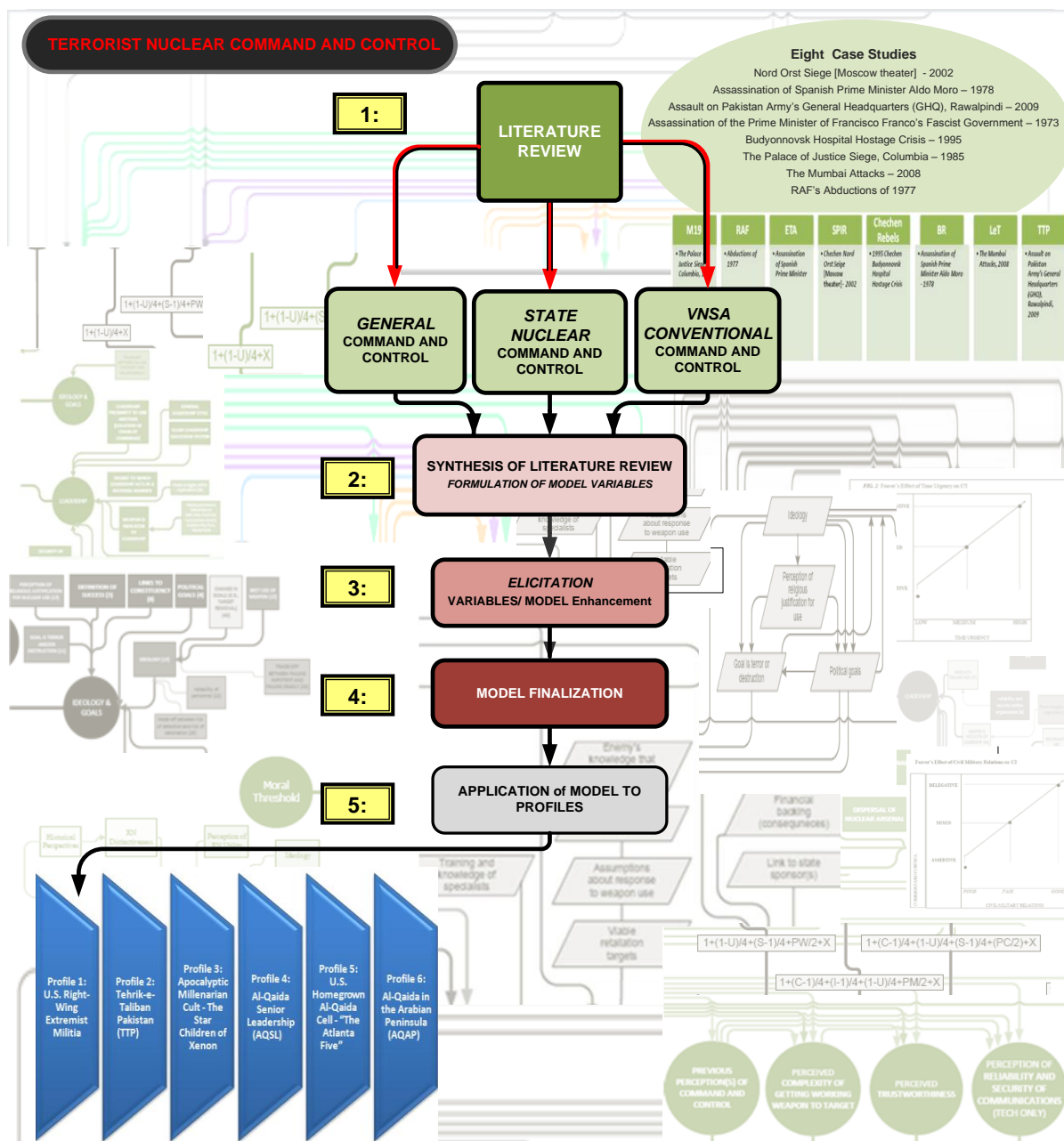
¹ The project initially intended to study the C2 surrounding radiological weapons as well as nuclear weapons, but it quickly became clear that the C2 for radiological weapons would differ very little, if at all, from the C2 for conventional

Significant variables related to VNSA command and control relevant to nuclear weapons are explored through detailed descriptions of several specific incidents of terrorism selected for the complexity of the operation, the ideology of the perpetrators, operational objectives, and other environmental factors that reveal variables applicable to nuclear command and control. The six attacks reveal a wide variety of tactics, goals, ideologies and outcomes. Moreover, each attack reveals several variables that potentially constitute salient factors with regard to how VNSAs would likely approach the challenges of nuclear command and control. Collectively, this section reveals, once again, the command and control similarities that exist in all organizations, be they business enterprises or nuclear-armed superpowers.

The surveys of existing knowledge and prior VNSA behavior set the stage for the construction of a preliminary model of VNSA nuclear C2. This was further developed by an expert elicitation, which consisted of a group of ten subject matter experts (SMEs) who completed a set of command and control exercises and put forward a variety of models. These SMEs were selected based on the diversity of their knowledge, and their formulations of nuclear command and control structures for specific and notional non-state actors were used to develop and supplement the original model. This step was necessary as the static nature of the literature requires that the pooled knowledge of experts be used to address the highly dynamic environments that influence VNSAs.

The resulting framework reflects the combined knowledge of the SMEs, who were asked to identify the most robust and significant factors impacting the nuclear command and control outcomes of VNSAs. The framework was then utilized by the project team to produce a model and assessment tool that anticipates the nuclear C2 configuration of a VNSA based on ten primary variables. This can be used to assist analysts by allowing them to input known data about groups into a structured profile, and produce either a confirmation of their qualitative analysis, or, if necessary, alter their data collection methods or inform them of a methodological oversight. This model is then applied to six VNSA profiles, including three from different manifestations of al Qaida, one from the Pakistani Neo-Taliban, and two semi-fictitious non-state organizations: a Right-Wing Militia group and an apocalyptic millenarian cult.

Figure 1: Overview of Project's Primary Components
([click here](#) for a higher resolution, more detailed, online version)



Literature Review:

Theory and Practice of Command and Control

Introduction

Because there are no known instances of a VNSA acquiring a nuclear weapon to date, empirically based theories of VNSA nuclear command and control are not available. However, recognition of the manifestation of command and control in other areas of human behavior allows researchers to identify common traits: variables likely to affect how VNSAs handle the possession and employment of nuclear weapons. The overarching goal of this initial chapter, consequently, is to acquaint readers with the concepts and practices of command and control. Since the advent of nuclear weapons and the ensuing arms race, command and control has largely been associated with nuclear weapons. However, because the term simply denotes the “*extension of authority over distance*,” command and control is a concept that likely arose with the mankind’s transition from hunters and gatherers to members of settled communities, roughly 10,000 years ago.² Aspects of modern-day nuclear command and control are therefore rooted in humanity’s primordial need to maintain permanent settlements while interacting with other sedentary groups. Thus, section one of this chapter gives a full definition of command and control—an accounting of its acute need over the past ten millennia. Section two surveys the *general* theories of command and control, including its demand for dominion and delegation. This section draws from relevant anthropological, social, and psychological studies of organizational structures. Following this exploration of theoretical organizational structures, section three describes how such regulative arrangements manifest in the command and control of nuclear weapons by states. While several nuclear-armed countries are investigated, due to a paucity of relevant open source data for most of these states, the *practice* of state nuclear command and control is largely explored via the United States. Finally, section four considers command and control arrangements of *non*-state actors as exhibited through seven operationally complex terrorist events. Unique from one another in time, circumstance, and perpetrator ideology, among other areas, each event (or “profile”) identifies which of the three broad command and control arrangements available was applied during each incident.³

I: Defining Command and Control & the Limits of Study

Although its underlying principles are as old as organized human behavior, the term “command and control” only gained widespread use after the Battle of the Bulge during the Second World War. Originally connoted as C², the term later morphed into C²I (command, control, and intelligence), C³I (command, control, communications and intelligence), C⁴I (command, control, communications, computers and intelligence), C⁴ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) and so on (C²⁷ being the extreme currently found in open sources).⁴ Because this study looks at a wide range of command and control arrangements, including some not military in nature, it largely adopts a simpler

² Harald Høiback, *Command and Control in Military Crisis* (London: Frank Cass, 2003), p. 9.

³ Available options, explored in detail below, are: 1) Assertive; 2) Delegative and 3) Pre-Determined.

⁴ See Høiback, *Command and Control in Military Crisis*, p. 9 and Thomas P. Coakley, *Command and Control for War and Peace* (Washington, DC: National Defense University Press, 1992), *passim*.

definitional starting point: command and control as the “*extension of authority over distance*.”⁵ Three interdependent aspects apply to this definition:⁶

1. *Authority has to be (somehow) established and organized.*
2. *Authority’s intentions have to be clear.* The targeted recipient group (implicitly or explicitly; tacitly or in other ways) must know what the authority wants to accomplish.
3. *Authority must be communicated.* Such dissemination can be two-way (a discussion); one-way (e.g., an order by signal); or the addressee can “guess” what to do if certain events/conditions occur. In this last case, the addressee has to infer what to do based on what they think the authoritative intention would be if instructions had been given. This is largely accomplished by observing what other members in the organization do. Such action is sometimes called *isomorphic*.

However, when solely exploring *state* command and control, this study employs a more specific definition: it adopts Paul Bracken’s definition of “an arrangement of facilities, personnel, procedures, and means of information acquisition, processing, and dissemination used by a commander in planning, directing, and controlling military operations.”⁷ Consequently, the goal of *nuclear* command and control is to have political control over nuclear forces while simultaneously maintaining the ability to *use* that force through military channels.

Open source explorations of command and control, undertaken with a view toward extracting data that informs future VNSA RN command and control configurations, present several challenges. At best, knowledge gleaned from related historical studies can only inform models predicting and explaining human behavior. To bridge that knowledge to actual RN-armed VNSA command and control behavior requires numerous assumptions about the transferability and relevance of factors in different domains.

Moreover, state nuclear command and control arrangements are understandably some of the most confidential of all state secrets. While publicly available reports and declarations exist, their vague content is largely designed to placate public and mid-level governmental concerns and, quite often, to signal state adversaries (e.g., bolster deterrence). While open source literature on state nuclear command and control literature certainly exists, it is overwhelming theoretical.⁸ Nominally “applicable” data, political scientist and historian of nuclear strategy Stephen Cimbala notes, should also be approached with caution because:

First, many of the persons most knowledgeable about command and control systems are not in a position, either legally or bureaucratically, to write what they know. Second, much of the academic literature is written by former government officials or defense consultants who have assembled in their minds a picture of how things work, based in access to classified materials, and then retrofitted the picture onto a template of open sources for publication. Third, on account of the second factor, and because of the normal herding instincts of academics and policy analysts there is a circle of persons writing about nuclear command and control for public consumption, whose bon fides cannot be challenged because admission to the group is by cooptation.⁹

⁵ This conforms to Høiback’s simplifying command and control model found in his *Command and Control in Military Crisis*. Høiback’s definition and model is largely drawn from Roger A. Beaumont, *The Nerves of War: Emerging Issue in and References to Command and Control* (Washington DC: AFCEA International Press, 1986), esp. p. 8. Such a parsimonious definition also mirrors what is found in Carl H. Builder, *Command Concepts: A Theory Derived from the Practice of Command and Control* (Santa Monica, CA: RAND Corporation, 1999).

⁶ These three aspects to command and control are drawn from Høiback, *Command and Control in Military Crisis*, pp. 3-11.

⁷ Paul Bracken, *The Command and Control of Nuclear Weapons* (New Haven, and London: Yale University Press, 1983), p. 48.

⁸ See, for example, Michael Quinlan, *Thinking About Nuclear Weapons: Principles, Problems, Prospects* (Oxford, UK: Oxford University Press, 2009) pp. 13-19.

⁹ Stephen J. Cimbala, *Nuclear Strategizing: Deterrence and Reality* (New York: Praeger, 1988), p. 33.

II: Social Sciences & the Study of Organizations

A. Functionalism and the Roots of Organizational Studies

The roots of functionalist organizational studies lie in the field of scientific management, the genesis for which began with the works of Frederick Taylor. “Taylorism,” sought to apply the scientific method to organizations in a quest to determine why some corporations succeed while others fail, and, subsequently, to replicate successful managerial attributes. Reaching their apex of popularity in the early twentieth century, these early studies treated organizations as separate component parts that interacted to create a whole organism.¹⁰

From the 1930s onward, functionalism further developed through the work of influential anthropologists like the Englishman Alfred Radcliffe-Brown, the Pole Bronislaw Malinowski, and the Frenchman Claude Levi-Strauss, among others. While the views of these anthropologists differed on whether the role of culture is to fulfill the needs of society (Radcliffe-Brown) or of the individual (Malinowski), and whether social relations between individuals are directly observable (Radcliffe-Brown) or theoretical constructs (Levi-Strauss), there is general agreement within the field that the goal of social anthropology is to identify social structures and formal relationships between them. Equally as important was the field’s study of how components of human behavior, culture, and relationships contribute to a relatively stable social structure or a “fabric” beyond biological control (i.e., patterns that are self-sustaining).

In the functionalist school of thought, an organization is metaphorically an organism that is capable of either conscious or unconscious change, yet the organization can only change slowly and reacts as a unit to external forces.¹¹ In the view of functionalists, organizations seek to maintain social and organizational equilibrium both internally and with other organizations. As there is no room for internal organization disagreement or for drastic and fundamentally destabilizing change in this framework, the values, needs and motivations of individuals and of the workforce are almost entirely discounted, with the field emphasizing how senior management can make organizations more effective and productive through structure and their own leadership.

B. Culture and Organizations

With the growth of transnational corporations in the mid-twentieth century, academics began to confront the issue of *cross-cultural* organizational theory. As diverse work forces and work cultures yielded varying level of success and productivity under traditional Western organization models and structures, sociologists, anthropologists, and psychologists began to investigate how unique cultural attributes can be factored into corporate structures to make decision-making and leadership more effective. Cross-cultural organizational studies posit that organizations must take into account national culture when addressing operations, decisions, and management; the most successful organizations, these studies demonstrate, are those

¹⁰ Functionalism (and its sister framework *structural* functionalism) is marked by application of the scientific method to social behaviors and social entities—including carrying out scientific observations and mathematical analysis of social units.

¹¹ With its roots in ecology, the “organization as an organism” metaphor is found in several social science frameworks and theories of the twentieth century, including Human Relations, Systems, and Contingency Theories. All of these disciplines focus their efforts on how the interactions and behaviors of sub-units (or “organs”) contribute to the health and function of the “organism” and how organisms interact with and relate to one another to maintain individual stability and ecosystem equilibrium. In addition to the organization as an organism, the two most popular metaphors for describing an organization are the organization as a machine, which is found particularly in the scientific management and closed systems frameworks, and the organization as culture, a metaphor found widely in anthropological studies. See Linda Smircich, “Concepts of Culture and Organizational Analysis,” *Administrative Science Quarterly*, Vol. 28, No. 3, (1983), p. 340; and Susan Wright, “Culture in Anthropology and Organizational Studies,” in Susan Wright, ed., *Anthropology of Organizations* (New York: Routledge, 1994), p. 18.

where the company culture and structure aligns with the national values, norms, and culture of the country in which it operates. The key goal of this research is to determine how collective “mental programming” of national culture (i.e., the development of culture on a social level) affects employee motivation, management, and organizational structure.

In short, functionalism and its related theories (e.g., structural functionalism) were all based on rational (e.g., measurable and quantifiable) explanations of organizations. As the field progressed and subjective cultural values were increasingly seen to play a key deterministic role vis-à-vis organizational structure and performance, the field was open for exploration by a variety of social science disciplines. Thus, as will be explored next, anthropological approaches to the field altered it forever.¹²

1. Defining Organizational Culture

Organizational anthropology is primarily concerned with identifying and describing the internal culture of an organization, as well as with determining how national and societal culture differences (outside forces) affect organizations. Perceived by researchers as one of many organizational variables and as a root metaphor for conceptualizing organization, culture has increasingly come to be seen as “an active process of meaning-making and contestation over definition, including of itself.” In this sense underlying organizational culture is not “a thing in itself,” but a process of defining what the organization is, means, and does.¹³

2. Dimensions of National Culture

Dutch sociologist Geert Hofstede produced the best known and most widely used of the of national culture frameworks.¹⁴ Value-based¹⁵ cultural frameworks such as Hofstede’s are used to study how to best structure and manage organizations, make decisions, and divide power within a given operating culture and environment. The five dimensions as described by Hofstede are:¹⁶

- 1) *Individualism versus Collectivism* (i.e., is performance orientated for the group or the individual?)
- 2) *Small versus Large Power Distance* (i.e., are leaders accessible—cognitively or in reality?)
- 3) *Masculine versus Feminine* (i.e., does the environment value typically “masculine” or “feminine” traits?)
- 4) *Short versus Long-Term Orientation* (i.e., is the environment conducive to long-term planning?)
- 5) *Weak versus Strong Uncertainty Avoidance* (i.e., does society identify clear consequences for risk failure and success).

¹² It is important to note that in organizational theory there are several steps to understanding how organizations behave; how their rituals, structure, and actions support their goals and underlying organizational assumptions; and how they are likely to respond to internal and external challenges. One generally begins the analysis by studying and defining the cultural context in which the organization is operating as well as the culture of the organization itself. Only then can models of organizational structures, behaviors, and decisions be made.

¹³ Wright, “Culture in Anthropology and Organizational Studies,” p. 18.

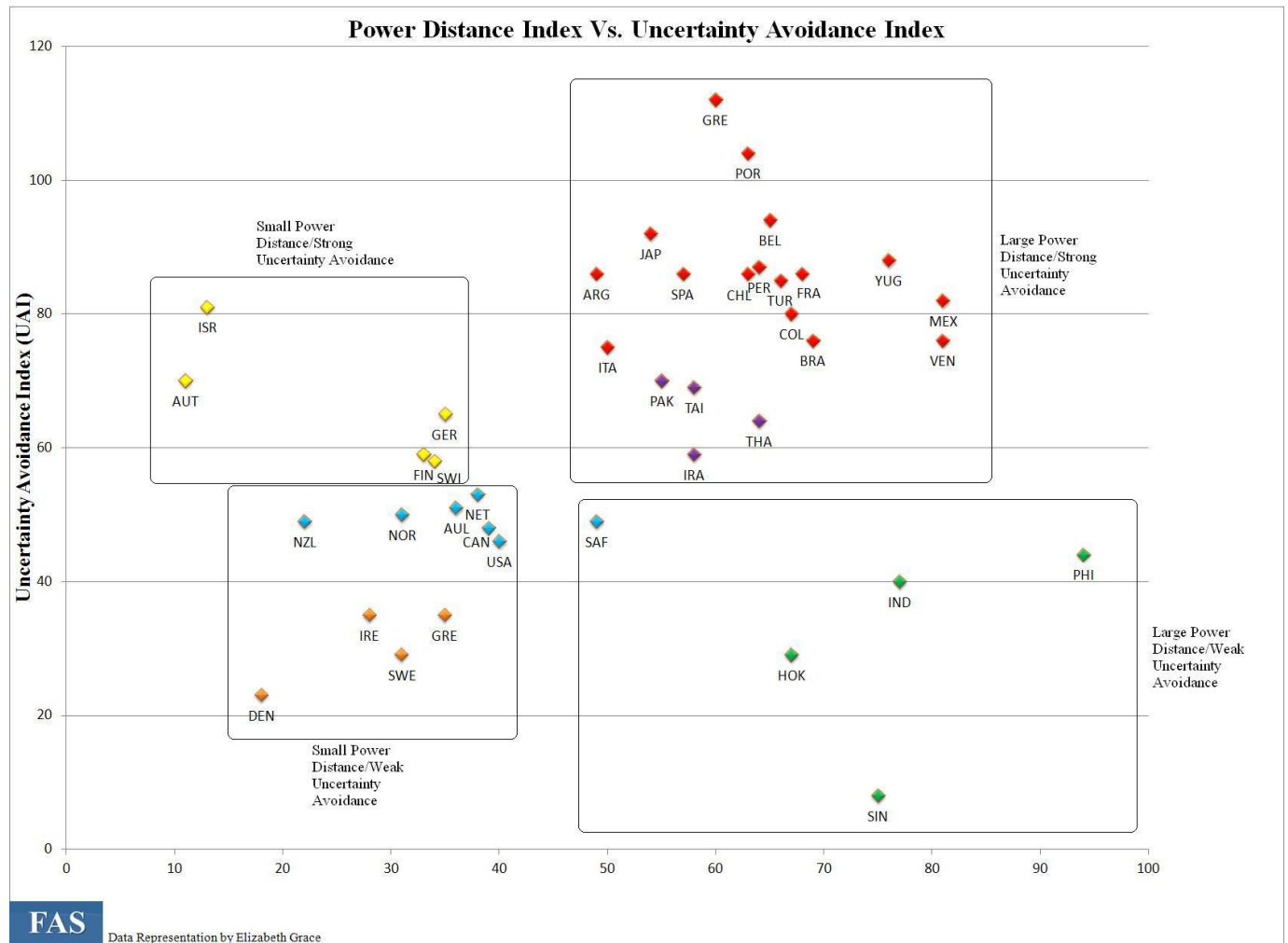
¹⁴ Geert Hofstede, *Culture’s Consequences: International Differences in Work-Related Values* (Beverly Hills: Sage Publications, 1980); Geert Hofstede, *Culture and Organizations: Software of the Mind* (London: McGraw-Hill, 1991); and Geert Hofstede and Michael Bond, “The Confucius Connection: from Cultural Roots to Economic Growth,” *Organizational Dynamics*, Vol. 16 (1988).

¹⁵ To date the study of individual and cultural values have been the dominant construct guiding cross-cultural psychology. However, understanding culture through one dimension, *value*, is viewed as highly limiting and over the past decade researchers have undertaken a quest to identify significant addition dimensions to describe and compare cultures. One promising dimension for studying culture is the *social axiom*. Social axioms are defined as general beliefs that “are pitched at a high level of abstraction and hence are likely to relate to social behaviors across a variety of contexts, actors, targets, and time periods...these beliefs [or social axioms] are the basic premises that people endorse to guide their behavior in different situations.” Kwong Leung et al., *Social Axioms: The Search for Universal Dimensions of General Beliefs about How the World Functions*,” *Journal of Cross-Cultural Psychology*, Vol. 33 (2002), pp. 286-302.

¹⁶ Hofstede, *Culture’s Consequences* and Hofstede, *Culture and Organizations*.

Hofstede's methodology involved collecting data from surveys of individuals in forty countries (later expanded to seventy-four) and quantitatively indexed each nation for each separate dimension. Two dimensions are then plotted on a grid that allows researchers to group countries based on their level of expression of the two traits. In addition, each dimension is correlated with, among other variables, socioeconomic data, including GNP, economic growth, population size, population growth, population density and organization size.

Figure 2: Power Distance Index vs. Uncertainty Avoidance Index



In order to visually and mathematically compare countries and derive meaning from their different scores on the five dimensions, Hofstede plots *power distance* and *uncertainty avoidance*; *power distance* and *individualism*; and *uncertainty avoidance* and *masculinity*.¹⁷ For example, in *power distance* and *uncertainty avoidance* a country can have large *power distance*/weak *uncertainty avoidance*, large *power distance*/strong *uncertainty avoidance*, small *power distance*/strong *uncertainty avoidance*, or small *power distance*/weak *uncertainty avoidance*. The United States—along with Australia, Canada, the Netherlands, New Zealand, Norway and South Africa—exhibits relatively weak *uncertainty avoidance* and small *power distance*. In such cases, leaders are seen to be relatively close to their subordinates and the latter expect to participate actively in organizational decisions; thus, more risk is likely to be taken in decision-making. At the

¹⁷ Hofstede, *Culture's Consequences*.

opposite spectrum, in countries with a large *power distance* and strong *uncertainty avoidance* (for example, Turkey, Venezuela, and Greece), risk is actively avoided or hedged at both the personal and organizational level; and leaders are seen to be far above their subordinates, who expect to be delegated to rather than actively involved in decisions.¹⁸

Subsequent research into national culture has validated the existence of many of Hofstede's cultural value dimensions and the value-based dimensions model has been widely applied in business and organizational studies.¹⁹ Despite criticism of Hofstede's framework,²⁰ it remains a valuable tool for understanding the national cultural context in which an organization operates. By providing knowledge of the underlying values of national cultures and the individuals within that nation, it is possible to analyze and model organizational characteristics, including decisions, power, and structure, and how these characteristics are likely to manifest within a given organization.

C. Social Psychology and Organizations

1. Artifacts, Espoused Beliefs, and Assumptions

Social psychology models of organizations and decision-making are framed around the individual and how human relationships, needs, and values form the basis of organizational dynamics, structures, and processes. According to organizational development expert Edgar Schein, the basic role of the organization is to meet the needs of each group member, and the individual's relationship with the organization must answer the four basic problems and concerns of each group member:

- Who am I and what is my role in the group?
- Will my need for influence and control be met?
- Will the group's goals allow me to meet my own needs and goals?
- Will the group meet my acceptance and intimacy needs and desires?²¹

Schein believes that organizations and groups must seek to meet these needs while simultaneously expressing the basic underlying assumptions of the organization.

Credited with inventing the term "corporate culture," Schein posits that an organization's *culture*²² has both visible artifacts and espoused beliefs, values, rules, and behavioral norms, all of which contribute to how the organization functions, makes decisions, and distributes power. Underlying these artifacts is a set of assumptions that forms the fundamental base of the organization and that explains the essence of the culture. Once assumptions, espoused beliefs and artifacts begin to be identified, Schein recommends defining the criteria for who is and who is not considered a member and determining the processes and criteria by which these decisions are made.²³ This important step, when combined with knowledge of the underlying assumptions, allows analysts to understand the *core culture* of the organization. From this point, all of an organization's artifacts and beliefs can be studied as dependent variables.

¹⁸ Ibid.

¹⁹ Bradley L Kirkman et al., "A Quarter Century of Culture's Consequences: a Review of Empirical Research Incorporating Hofstede's Cultural Values Framework," *Journal of International Business Studies*, Vol. 37 (2006); and V.N. Awasthi et al., "Performance Measurement and Resource Expenditure Choices in a Teamwork Environment: The Effects of National Culture," *Management Accounting Research*, Vol. 9 (1998).

²⁰ Hofstede's work has been widely criticized for its methodology, its equation of nation with culture, and for the model's inability to express complexity in culture (simplified by Hofstede to a set of fixed numeric indices and matrices).

Anthropologists especially criticize Hofstede's equation of culture with national socio-economic variables and failure to adequately control for wealth and social class. See, for example, Rachel Baskerville, "Hofstede Never Studied Culture" *Accounting, Organizations and Society*, Vol. 28, No. 1 (2003).

²¹ Edgar H. Schein, *Organizational Psychology*, 3rd ed. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1980), p. 179.

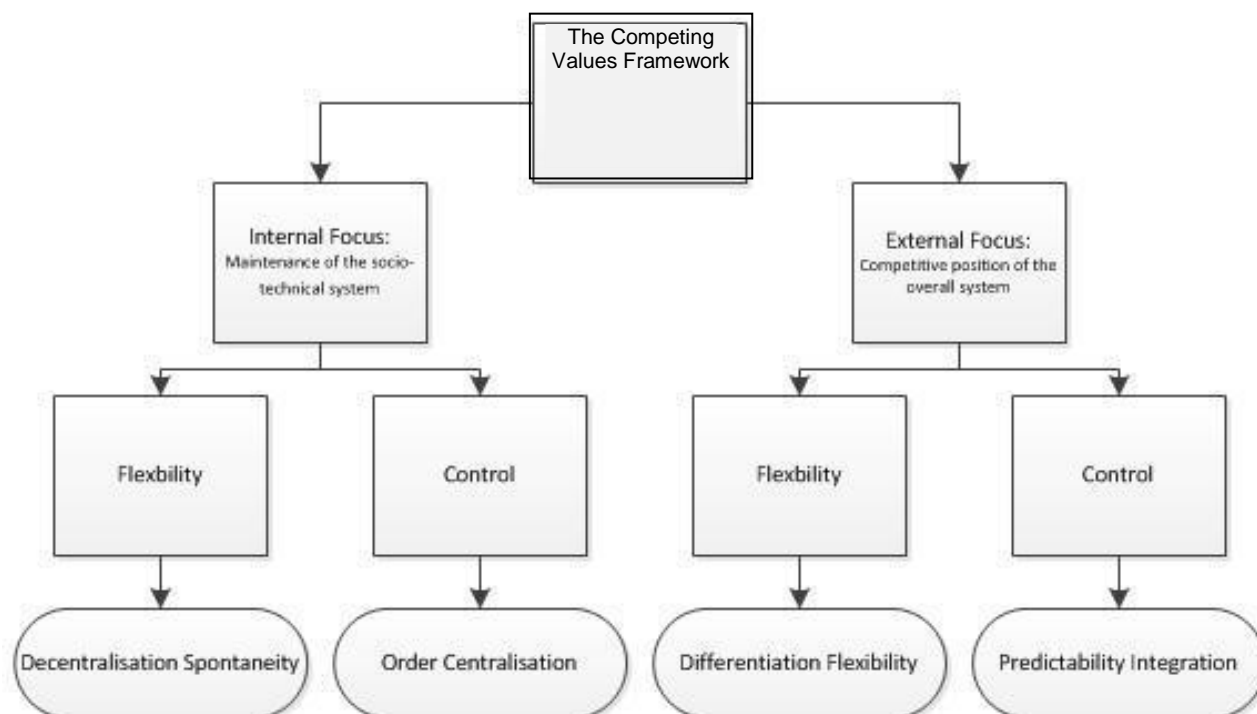
²² Schein defines "culture" as follows: "The culture of a group can now be defined as a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." Schein, *Organizational Psychology*, p. 17.

²³ Schein, *Organizational Psychology*, p. 120.

Schein's methodology is credited with pioneering understandings of the behaviors, potentials, and, ultimately, successes of organizations.²⁴ While Schein does not specifically model how to determine command and control within an organization, the social psychology tool of understanding the underlying assumptions and membership criteria of an organization, combined with an understanding of the organizational stage²⁵ in which the organization operates, allows analysts to predict how a group is likely to react, develop hierarchy, and delegate authority in order to align with their organizational culture.²⁶

2. The Competing Values Framework

Figure 3: The Competing Values Framework



FAS Data Representation by Elizabeth Grace

²⁴ Ibid, p. 59.

²⁵ Schein posits that there are four stages of group building: group formation, group building, group work, and group maturity. Each stage has a different dominant assumption and socioemotional focus. During group formation the group is dependent upon the leader and the socioemotional focus is self-orientation. In group building this transitions to a dominant assumption focuses on fusion and the group sees itself as an idealized and cohesive object. During the group work stage the dominant assumption shifts to a focus on work, where the ability to perform effectively is valued and the emotional focus is on accomplishment, team work, and team maintenance. This is the only group stage where team member difference is highly valued. During the final stage, group maturity, the focus of the organization is on maintenance of the mature state; past success is taken to be proof that the group is right and the group emphasizes preservation of the group and culture, seeing member differences as a threat. Schein, *Organizational Psychology*, p. 70.

²⁶ Schein, *Organizational Psychology*, p. 292.

Kim Cameron and Robert Quinn, the developers of the Competing Values Framework, attempt to determine what makes organizations effective by identifying types of organizational cultures, defining factors contributing to organization success, and determining what traits make for effective leaders. Defining organizational culture as one that is “reflected by what is valued,” they see culture as being composed of “the dominant leadership style, the language and symbols, the procedures and routines, and the definitions of success that make an organization unique.”²⁷

The resulting model for studying organizational culture and form, the Competing Values Framework, is comprised of four clusters, each representing what people value about organizational performance and using performance as a corollary for underlying assumptions about why an organization exists. Their model attempts to determine the efficacy of the organization by defining which factors contribute to its success. The first dimension (see diagram above) separates effectiveness criteria related to “flexibility and dynamism” (the left area of the diagram) from those effectiveness criteria related to “stability and control” (the right area of the diagram). The second dimension separates effectiveness criteria related to “internal focus” (higher area of the diagram) from those related to an “external focus” (the lower area of the diagram). The four resulting clusters are identified as:

1. The Clan (Internal-Flexible)
2. The Hierarchy (Internal Stable)
3. The Market (External Stable)
4. The Adhocracy (External Flexible)

The *Clan Culture Model* of organization is characterized by shared values and goals, cohesion, a strong participatory culture, and a unifying sense of “we” throughout the organization. Akin to the collectivist dimension described by Hofstede in orientation, clans are characterized by “teamwork, employee involvement programmes, and corporate commitment to employees” as well as by cohesion and mutual member-organization commitment.²⁸ Management exists to empower employees and facilitate their participation, to enable personal and team development, and to support commitment and the organizational structure that includes small, semi-autonomous groups rather than a linear, hierarchical structure.²⁹ These organizations have highly distributed power structures (i.e., power lies with a wide variety of people in the organization as opposed to a narrow group) and encourage member participation in, and in review of, decision-making and organization and personal performance. Tasks are frequently given without supervision and command and control is very loosely held; members are perceived as loyal and are therefore given the power and capacity to contribute substantively to organization development.

Based largely on the work of Max Weber, the *Hierarchy Culture Model* describes an ideal bureaucracy that produces stable and consistent output and services as long as the environment is relatively stable.³⁰ In a hierarchy organization, control is maintained through clear lines of decision-making authority with important decisions, especially those related to existential matters, retained at the top of the organization. Standardized rules and procedures, controls and accountability mechanisms are highly valued and are explicitly stated to members.

The *Market Culture Model* is based on the notion that organizational effectiveness is achieved by controlling transaction costs. Oriented toward the external environment and focused on transactions with external constituencies, the market maintains internal control through specialized jobs (generally specialized by skill and for a specific task), rules, and centralized decisions. Competitiveness and productivity are the key

²⁷ Kim S. Cameron and Robert E. Quinn, *Diagnosing and Change Organizational Culture: Based on the Competing Values Framework* (Reading: Addison-Wesley, 1999).

²⁸ Cameron and Quinn, *Diagnosing and Change Organizational Culture*.

²⁹ Ibid.

³⁰ Ivan Yardley and Derrick J. Neal, “Understanding the Leadership and Culture Dynamic within a Military Context: Applying Theory to an Operational and Business Context,” *Defense Studies*, Vol. 7, No. 1 (2007), p. 27.

values of markets, and creating a competitive advantage relative to other organizations is a key objective. As market organizations consider the external environment to be hostile, control and power are tightly held at the center of the organizations. While tasks and daily decisions are often highly dispersed (for example, through making use of contracting organizations), no one outside the core leadership group has the capacity to make critical decisions.³¹

The *Adhocracy Culture Model* of organization describes organizations designed to respond easily and quickly to rapidly changing and turbulent conditions. Key values of these types of organizations are adaptation and innovation. Such organizations assume that “innovation and pioneering initiatives lead to success, organizations are mainly in the business of preparing new products and services and preparing for the future and that the major task of management is to foster entrepreneurship, creativity, and activity on the cutting edge.”³² Moreover, these organizations embrace organized anarchy (e.g., quick decisions made in turbulent and unpredictable markets) and seek to foster adaptability, flexibility, and creativity. Decision-making and planning processes follow a short time-scale, continually seek to anticipate future changes, and are high-risk compared to other types of organizations. Throughout the organization, the long-term objectives are to grow rapidly and acquire new resources, and members are encouraged to take initiative and seek out innovative opportunities. Individual members have a great deal of power to act independently, but are also individually responsible for failure and are encouraged to follow set processes to assess risk.³³

D. Organization Structures and Control

Within organizational studies there are numerous frameworks for understanding how organizations are structured and the impact of structure upon decisions, power delegation, and control within an organization. Below are three of the key frameworks that have been widely applied for modeling and understanding organizational structure as it applies to command and control decisions.³⁴

1. Configurational Organization Perspective

In the classical configurational framework or view, an organization's structure is modeled on a traditional organization chart and is characterized by two core features. The first is the division or decomposition of an overall objective into subtasks to be performed by members. The second is the integration of these subtasks in order to achieve an effective organizational performance.³⁵ This division is effectively implemented by coordinating subtasks under the supervision of a single manager, and the system is characterized by “vertical lines of management, power, and decision-making with common purpose uniting at top, senior management below, each controlling distinct subgroups of individuals or resources, based on type of resource, process, or goal.”³⁶ Within configurational analysis, decision-making is considered to be top-down and hierarchical, with command coming down from senior management. Non-core members have no control over critical organizational planning, decisions, and objective creation, regardless of their level of autonomy within their own subgroup.

Assuming a closed system, this analytical framework is useful for determining resource distribution and power within an organization that is purposeful, intentional, and marked by hierarchical power distribution. It is especially useful in analyzing organizations falling into the Max Weber's “hierarchy culture”: organizations

³¹ Yardley and Neal, “Understanding the Leadership and Culture Dynamic within a Military Context, p. 28.

³² Cameron and Quinn, *Diagnosing and Change Organizational Culture*.

³³ Yardley and Neal, “Understanding the Leadership and Culture Dynamic within a Military Context,” p. 32.

³⁴ While not representative of all organizational structure frameworks, the selection provided includes several fundamental analytical frameworks widely in use in social science organizational studies today.

³⁵ Gregory K. Dow, “Configurational and Coactivational Views of Organizational Structure,” *The Academy of Management Review*, Vol. 3, No. 1 (1988), p. 55.

³⁶ Dow, “Configurational and Coactivational Views of Organizational Structure,” p. 55.

characterized by a stable environment where tasks and functions can be integrated and coordinated, with clear lines of decision-making authority and standardized rules and authority. However, this framework assumes that all members of an organization are working towards the same goal and often ignores intra-organizational conflict and movement against or counter to the management.³⁷ Within this framework, organizations are viewed as fundamentally different from markets and market interactions, as organizations are viewed to arise through deliberate design rather than markets, which arise through emergent force.

2. Coactivational Organization Perspective

As opposed to the authoritative coordination of work found in the configurational framework, the coactivational perspective of an organization is “a communication network in which members or subunits recurrently process resources and information.”³⁸ In this analytical perspective, organizations are represented by flow charts of resources and information *through* the system, as opposed to conventional organizational charts (e.g., the Configurational Organization Perspective). A perspective borrowed from ecological notions of patterns and adaptation or incremental change, in a coactivational perspective, a social system is identical to the patterns of resource and information flow generated by the decision rules of its component members or subunits.

The primary objective of analysis using this perspective is to understand why decisions and decision rules are what they are. To achieve this goal three principle variables are studied:

- The decision rules of organization members
- Constraints to resource and information flow
- Exchanges between the organization and its environment

The first variable attempts to represent systematically the coding systems and observed behavior of each member. Note that decision rules are not directly observed, but that each member and unit's decision rules are inferred through study of the relationship between incoming messages and communication and the member's behavioral response.³⁹ With the second variable, the constraints on the members' ability to acquire resources and information—both technological and institutional—are studied. Note that as constraints are an independent variable for analysis, only external or structural constraints are considered as of the variable, rather than constraints imposed by internal members and their behavior.⁴⁰ The third variable is the response of the external environment to actions taken by organization members. As the coactivational perspective assumes an open (rather than closed) system, the web of “incentives, information exchanges, and power relations” between organization members and the external environment is critical to understanding decisions, power structures, and control within the organization.⁴¹

In analyzing these three variables, the coactivational perspective can characterize the way in which decisions are made and how decision-making authority is generated and controlled within the organization. Given the realistic constraints imposed upon the organization, the symbolic behavior of individuals within the organization, and the responses of outside units and persons to the organization as the independent variables of analysis, researchers attempt both to ascertain the underlying assumptions of the organization that drive its values and behaviors, and to understand how internal dynamics drive current and future decisions, structure, and behavior patterns.⁴²

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid.

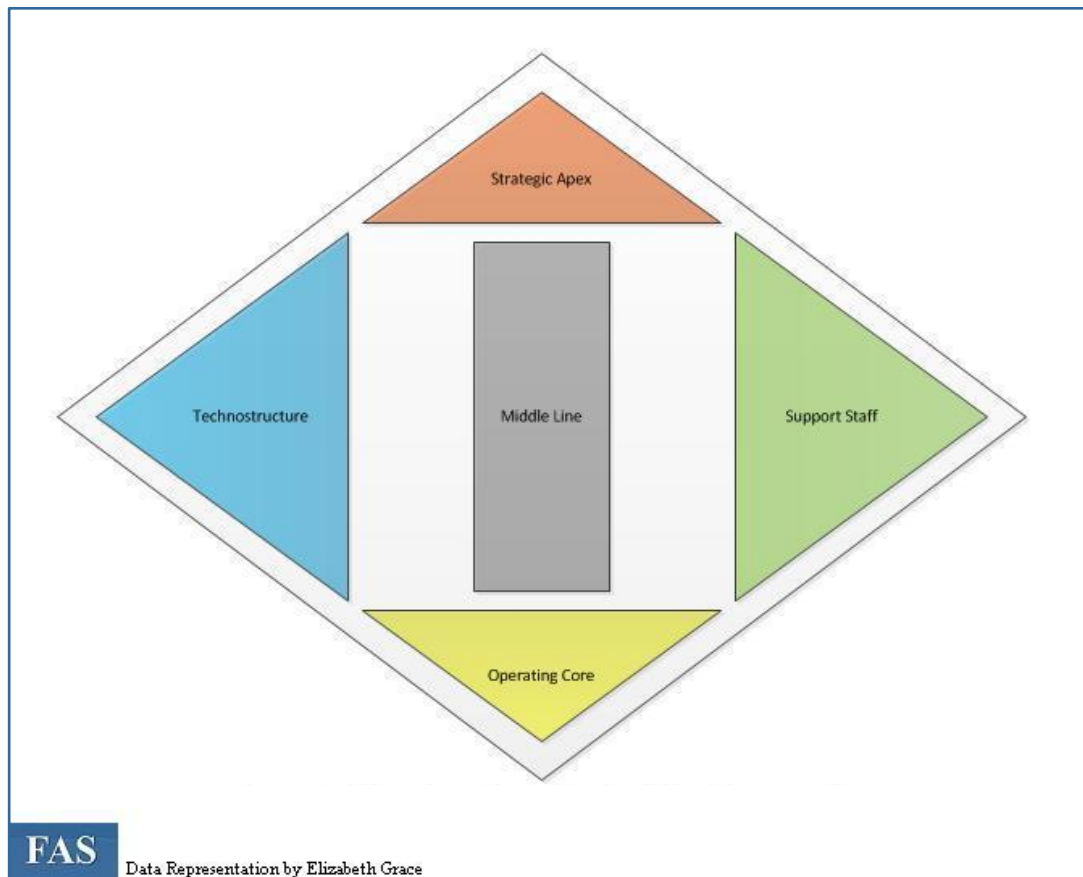
⁴⁰ Ibid, p. 58.

⁴¹ Ibid, p. 57.

⁴² Schein, *Organizational Psychology*, p. 292.

3. Mintzberg's Typology of Five

Figure 4: The Five Basic Parts of the Organization



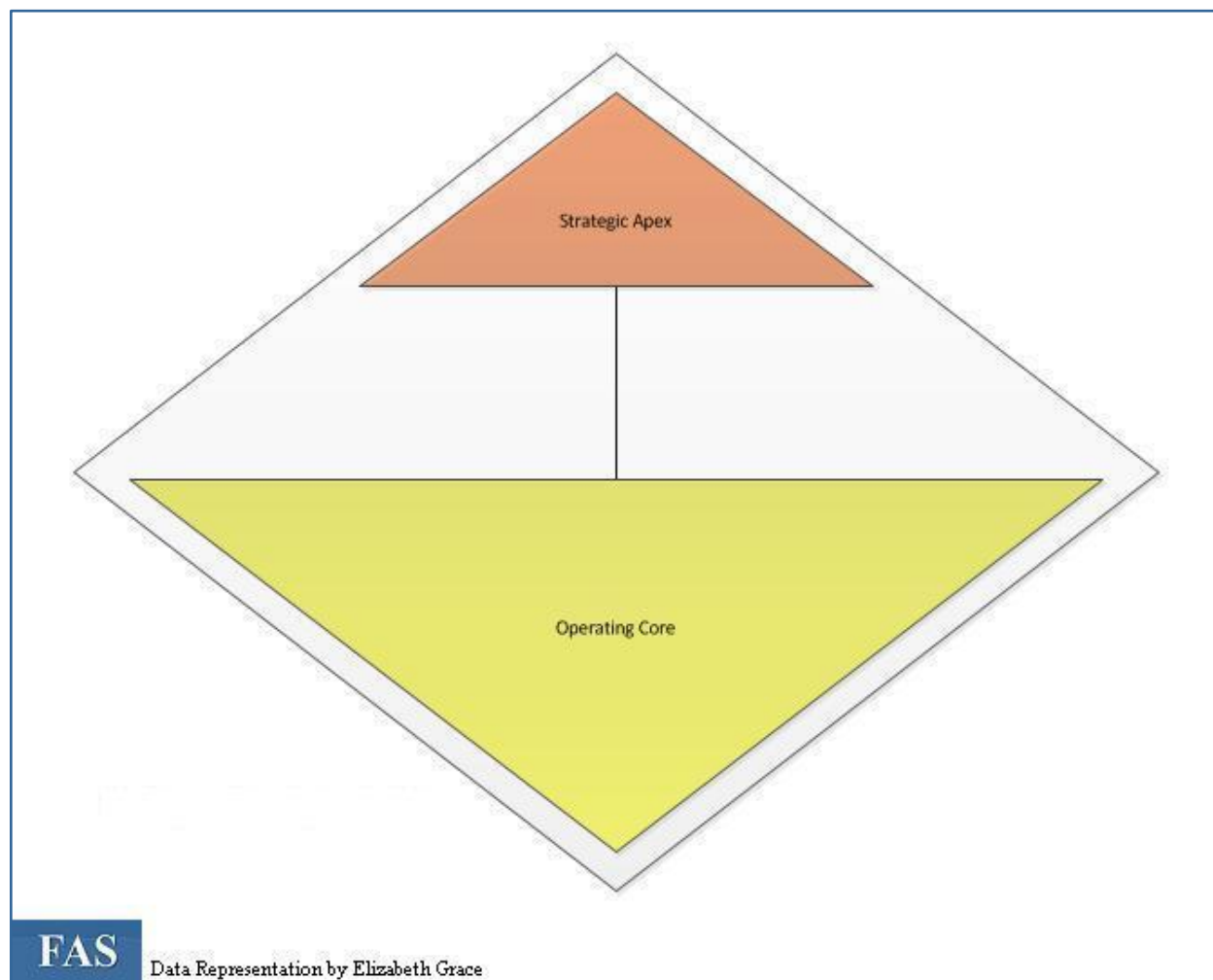
While analytical frameworks such as the Competing Values Framework lay out only one level of categories in an indexed form and prefer to use specific descriptions to explain the behaviors and characteristics of organizations, frameworks such as those developed by management and business strategist Henry Mintzberg are highly stratified group organization types. In Mintzberg's analysis, all organizations can be best described through five configurations that categorize organizations by their basic structure and form:

- 1) Simple Structure
- 2) Machine Bureaucracy
- 3) Professional Bureaucracy
- 4) Divisionalized Form
- 5) Adhocracy

At the next levels of analysis, each organization is comprised of five basic parts: the operating core, strategic apex, middle line, technostructure, and support staff. Additionally, five basic "mechanisms for coordination" are considered: mutual adjustment, direct supervision, and the standardization of work processes, outputs, and skills. Each organization is further characterized by specific design parameters and contingency factors. In practice, while no organization can be perfectly categorized, due to the nature of their differences, each of the five configurations relies on one of the five coordinating mechanism and tends

to favor one of the five parts.⁴³ While Mintzberg's five basic parts are imperfectly adapted for describing many non-corporate organizations, the configuration and mechanisms for coordination are useful for categorizing organizations to determine how they hold and distribute power, make decisions, and are likely to act in a given scenario.

Figure 5: The Simple Structure



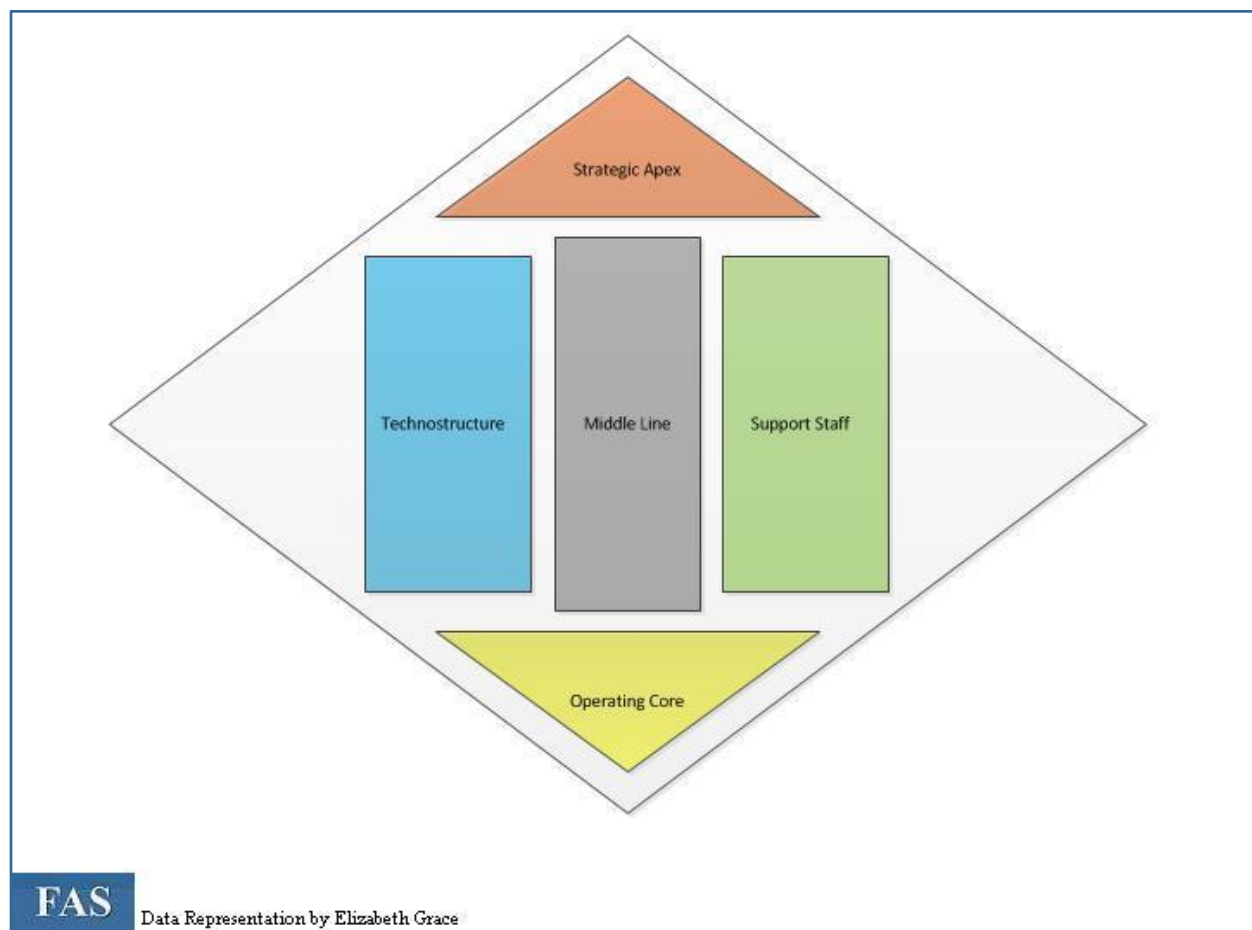
Simple Structure

The basic organizing principle of simple structure is direct supervision. Highly centralized, this structure aims to allow all key decisions of the operating core to originate with a chief executive officer or similar official, giving little initiative to direct managers or to workers. This structure involves minimal training of members and demands little loyalty from its members. There are only limited planning mechanisms and few communication tools between different functional units and between units and the core. Young

⁴³ Henry Mintzberg, "Structure in 5's: A Synthesis of the Research on Organizational Design," *Management Science*, Vol. 26, No. 3 (1980), p. 328.

organizations and those in hostile environments tend to use simple structures as they are informal, have few rules, and are very adaptable.⁴⁴

Figure 6: The Machine Bureaucracy



Machine Bureaucracy

The basic organizing principle of machine bureaucracy is standardization of work. Generally operating in environments that are simple and stable, these organizations have limited horizontal decentralization. According to Mintzberg, “Rules and regulations—an obsession with control—permeate the entire structure; formal communication is favored at all levels; decision-making tends to follow the formal chain of authority. Only at the strategic apex are the different functional responsibilities brought together; therefore, only at this level can the major decisions be made, hence the centralization of the structure in the vertical dimension.”⁴⁵

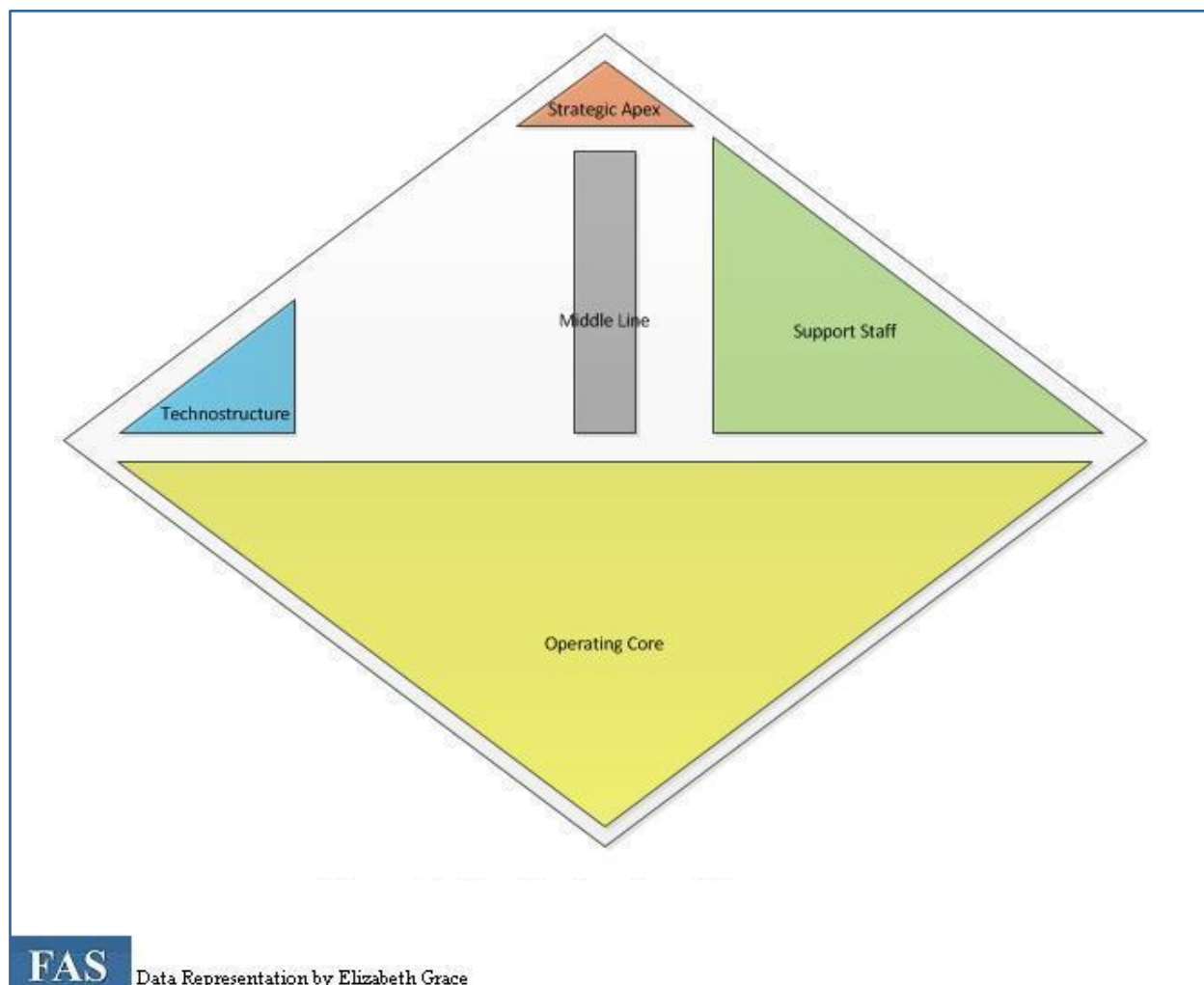
Professional Bureaucracy

⁴⁴ Ibid, p. 330.

⁴⁵ Ibid, p. 332.

The basic organizing principle of professional bureaucracy is standardization of skills. Highly decentralized, these organizations operate in environments that are complex but stable. Members are highly valued and trained “professionals” who are given a good deal of autonomy and freedom to operate as they choose. While there is a strong coordinating mechanism, there is limited “techno-structure” as the work itself is not easily standardized. While supported by lesser trained staff that operates in more of a machine bureaucracy, the professional members of the organization have control both over their own work and over

Figure 7: The Professional Bureaucracy



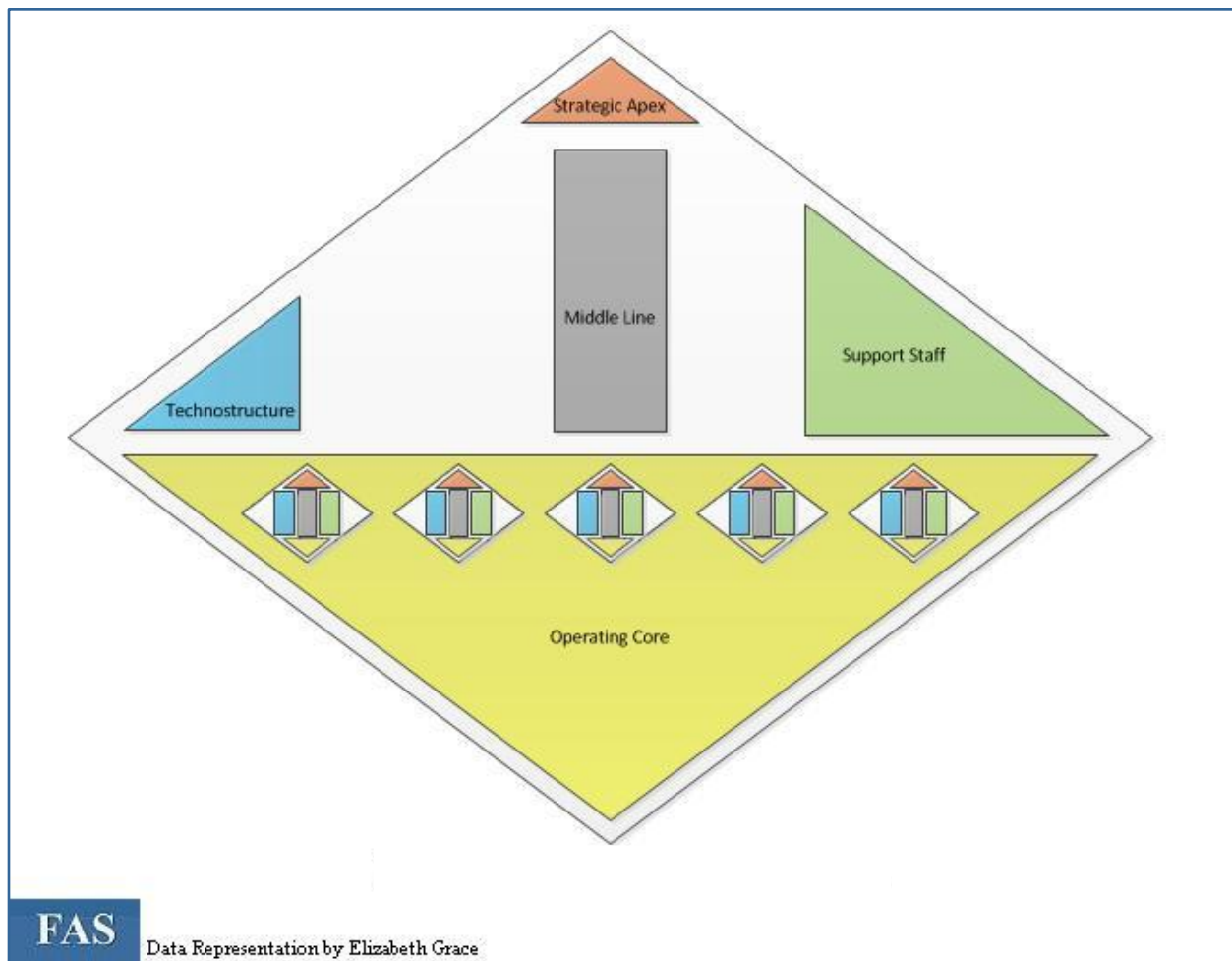
the central administration. Professionals can independently make major decisions regarding their own work and may be given authority to contribute to organizational-level decisions.⁴⁶

Divisionalized Form

The basic organizing principle of divisionalized form is standardization of outputs. A market based structure; the divisionalized form is the superimposition of one organizational form atop other divisions. Being a common form for parent companies in multinational corporations where the separate divisions exhibit little interdependence, these organizations exhibit limited vertical decentralization. Many divisions report to one

⁴⁶ Ibid, p. 334.

Figure 8: The Divisionalized Form



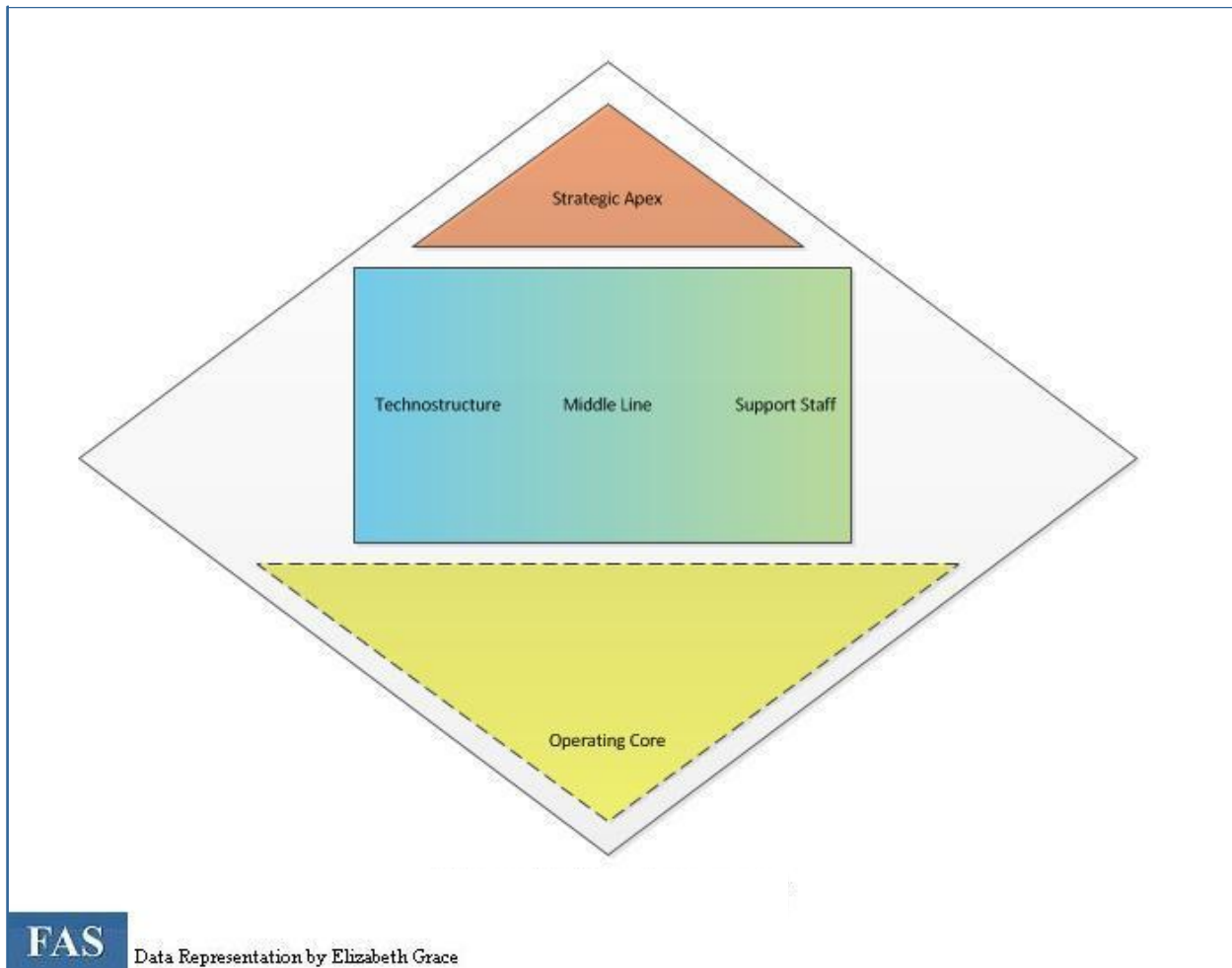
central headquarters, and the primary concern of the headquarters is to coordinate divisional goals with central goals without sacrificing divisional autonomy. Market diversity is the key driver behind this form.

While power is still tightly held by a crew, division leaders have significant control over operations and the implementation of goals and processes. Additionally, they can contribute significantly to critical organizational planning, including expansion, future diversification, and fundamental goal shifts.

Adhocracy

The basic organizing principle of adhocracy is mutual adjustment. An organization structure with little formalized behavior, professional specialists are grouped by function, but deployed in market-based teams for project-focused work. Featuring selective decentralization, these organizations depend upon *liaison* devices to encourage mutual adjustment within and between groups, which are semi-autonomous and operate with almost full command and control within their individual units. With an opaque distinction between members and core administrators, strategy is not a top-down function, but rather a result of ad hoc decisions made at the project level. Of all organization types, adhocracies have the most dispersed and flexible control structure.

Figure 9: The Adhocracy



4. Organizational Dynamics Framework

Kotter's Organizational Dynamics model is an overarching diagnostic model that is used to analyze short, medium and long-term organizational dynamics.⁴⁷ This model views the organization's structure as a web of components that feed into and off of one another in a continuous dynamic. The goal of this model is to aid users in ascertaining how dynamics will change over time and how changes in one element will impact other elements and organizational processes. As it relates to command and control issues, this model can be used to detect destabilizing factors within an organization, to assess how power dynamics are likely to shift as the organization evolves and as external forces or members act upon the organization, and to understand feedback between separate component parts of the organization.

At the center of the model are the key organizational processes: information gathering, decision making, and matter/energy transporting and conversion. Around the organizational processes are six major variables: social system, technology, external environment, dominant coalition, formal organizational

⁴⁷ Schein, *Organizational Psychology*, p. 224.

arrangements, and employees and other tangible assets.⁴⁸ Over the short-term, dynamics result from specific cause-effect relationships between the organizational processes and six other elements, meaning that any change in the elements will immediately impact the organizational processes. Consequently, decision-making and control structures can be directly affected within a short timeframe by changes to any of the six elements.

Figure 10: Kotter's Organizational Dynamics Model

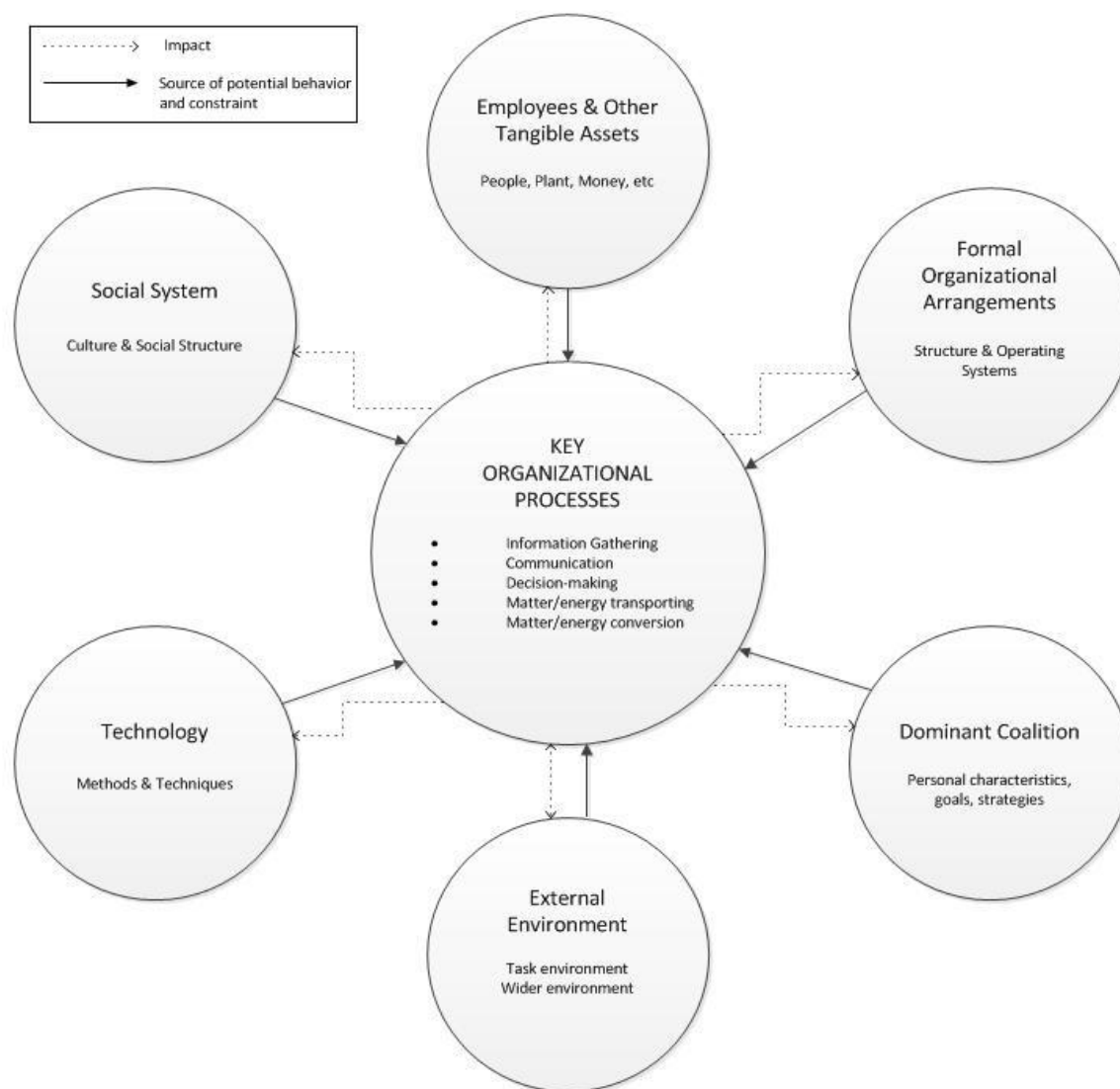


Figure 9: Kotter's Organizational Dynamics Model

⁴⁸ John P. Kotter, *Organizational Dynamics: Diagnosis and Intervention* (Reading: Addison-Wesley, 1978), p. 10.

III: State Nuclear Command and Control

A. Establishing a Framework: Assumptions of State Nuclear Command and Control

1. The Always/Never Dilemma

According to most relevant scholarly literature, all possessors of nuclear weapons, including new nuclear states, confront an inexorable dilemma.⁴⁹ On one hand, in order to leverage or employ the weapon's unique power, it must *always* explode, or credibly threaten to explode, "in the prescribed fashion when authorized leaders direct so."⁵⁰ On the other hand, nuclear weapons can *never* explode without the authorization of the proper authorities.⁵¹ In balancing these two inherently conflicting goals, authorities must choose to utilize its corollary: a more "assertive" or more "delegative" command and control system.⁵²

Every precaution taken to make something more secure also makes it less accessible. Consequently, *delegative* control, in which subordinate military commanders have physical control of the weapons and are authorized to make nuclear launch decisions under certain defined circumstances, ensures that the weapons can always be employed when necessary. Additionally, delegative control typically implies that weapons be kept on a high levels of alert.⁵³ In contrast, ensuring that nuclear weapons never detonate unless authorized, *assertive* control is a command and control arrangement in which the decision to launch a nuclear weapon is retained solely by top political leaders. Examples of this type of control include authorization codes that verify employment authorization and/or "unlock" the weapons for use. Moreover, assertive control can be maintained by keeping the weapons disassembled (i.e., separating the weapon's fissile core from its non-nuclear explosive, circuitry and casing components) or if assembled, having their delivery systems detached and stored separately.⁵⁴ Balancing these two extremes is critical and difficult; actions taken to achieve one of these goals often reduce the possibility of achieving the other.⁵⁵ If a leader's

⁴⁹ See, for example, Peter D. Feaver, *Guarding the Guardians: Civilian Control of Nuclear Weapons in the United States* (Ithaca: Cornell University Press, 1992); Peter D. Feaver, "Command and Control in Emerging Nuclear States," *International Security*, Vol.17, No. 3 (Winter 1992/93), pp. 160-187; Scott D. Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton: Princeton University Press, 1993); and Scott D. Sagan, "The Origins of Military Doctrine and Command and Control Systems" in Peter R. Lavoy, Scott D. Sagan, and James J. Wirtz, eds., *Planning the Unthinkable* (Ithaca and London: Cornell University Press, 2000).

⁵⁰ Feaver, *Guarding the Guardians*, p. 12.

⁵¹ See also, John Steinbruner, "Choices and Trade-offs," in Ashton B. Carter, John D. Steinbruner, and Charles A Zraket eds., *Managing Nuclear Operations* (Washington, DC: The Brookings Institute, 1987), p. 539.

⁵² No system, at least in theory, is expected to lie entirely at one extreme; command and control configurations are thought to lie somewhere along the assertive/delegative continuum.

⁵³ Feaver, "Command and Control in Emerging Nuclear States," p. 178. Unless otherwise noted, the term "delegative" and predelegative" are used to denote the same phenomenon. "High alert levels" can mean, on one extreme, having weapons on hair-trigger alert, ready to fire at a moment's notice. On the other extreme, it can imply that the weapon is made ready for employment in very short period (e.g., the weapon needs to be mated to its delivery system). Thus, even in a highly delegative system there are ways theoretically to control the use of weapons with regard to avoiding unauthorized employment.

⁵⁴ For more on authorization codes and locking mechanisms see Peter Stein and Peter Feaver, *Assuring Control of Nuclear Weapons: The Evolution of Permissive Action Links* (Lanham, MD: University Press of America, 1987); and Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton: Princeton University Press, 1989). For revelations that nuclear weapon locking systems employed by the United States were, at times, deeply flawed, see Bruce Blair, "Keeping Presidents in the Nuclear Dark, Episode #1: The Case of the Missing Permissive Action Links," Center For Defense Information, Bruce Blair's Nuclear Column, February 11, 2004. Available at: <http://www.cdi.org/blair/permissive-action-links.cfm>

⁵⁵ From the perspective of informed analysts, "the always/never dilemma obtains *even if the leaders are unaware of its existence or fail to address it explicitly*. The command and control system is a de facto resolution of the dilemma." Feaver, "Command and Control in Emerging Nuclear States," p. 168. Emphasis added.

control of the weapons is too relaxed (i.e., delegative), weapons can “fail deadly” in the form of an accidental or unauthorized launch. Conversely, if control is too firm (i.e., assertive), weapons can “fail impotent” if the leadership is “decapitated” and has no chance of retaliation.⁵⁶

2. Predelegation of Command and Control⁵⁷

To reiterate, predelegation of nuclear command authority is one outcome of the always/never dilemma. Since continuation of the state is the supreme goal of a states’ political leader, delegation is an issue of paramount importance. If leadership predelegates too little, the result may be a failure of that state’s deterrent strategy (due to an enemy’s perception that a decapitating nuclear assault might work) or an inability to employ nuclear weapons timely in a war-fighting environment. Conversely, if delegation gives the state’s military forces too much authority, the result might be accidental or unauthorized use of nuclear weapons that could also threaten the state’s existence (e.g., nuclear retaliation to an unauthorized nuclear event⁵⁸). Nuclear operations expert Paul Bracken terms this struggle as being between “provincial control” and “political control” of nuclear forces.⁵⁹ The former notion deals with a command system that strives for the most efficient use of its armies’ forces. In Clausewitzian terms, provincial control is the area of the “dual system of warfare in which strategy and tactics are left to military professionals.”⁶⁰

In contrast, political control addresses a higher level of strategy; it deals with a command system concerned with a “grand strategy” and forms of “statecraft” whose goals are ultimately outside that of war.⁶¹

State nuclear predelegation is manifest in two broad ways. The first is “central delegation” whose principle mission is deterrence from and “retaliation after a massive nuclear attack by the enemy in which no central authority, or effective communication, exists to authorize nuclear strikes in response.”⁶² The second, the delegation of “general forces,” involves the protection of a states’ armies, navies, and air forces when they are involved in confronting enemy forces in a theatre of operation.

⁵⁶ Feaver describes decapitation as “an enemy nuclear attack against command and control centers, particularly against the national leadership . . . which would render the [state] unable to respond even if a sizable portion of the . . . nuclear arsenal survived.” Feaver, *Guarding the Guardians*, pp. 73-74. John Steinbruner has observed that a state would be rational to launch a decapitation strike if it perceived that a nuclear war was unavoidable. He notes that deterrence and prevention of war are different things: “Leaders could be powerfully deterred from war, yet still conclude in the midst of crisis that war will inevitably occur against their will. In that case, they would be strongly motivated to initiate a command structure attack to reduce the damage they would ultimately suffer. Thus, significant tradeoffs exist between the requirements of deterrence and of stabilizing a crisis. *The former requires manipulation of threat, the latter manipulation of reassurance.*” In other words, a state’s vulnerability to decapitation can be a force *strengthening* deterrence because construction of a survivable command and control system might be interpreted by a nuclear rival as a sign of a growing disposition to initiate war. This could result in the rival state seeing nuclear war as inevitable, “in a serious crisis and on the basis of less compelling information.” Furthermore, Steinbruner sees two distinct advantages to launching a decapitation strike “although it would preclude a bargained end of the war.” First, “by eliminating central coordination it sharply reduces the military effectiveness of opposing strategic forces; second, it offers some small chance that complete decapitation will occur and no retaliation will follow.” John D. Steinbruner, “Nuclear Decapitation,” *Foreign Policy*(Winter), pp. 1981-82, 19 and 27. Emphasis added.

⁵⁷ Much of the following discussion is based on Paul Bracken, “Delegation of Nuclear Command Authority,” in Carter, Steinbruner, and Zraket eds., *Managing Nuclear Operations*, pp. 352-372.

⁵⁸ States perceiving that another state’s nuclear command and control is not properly safeguarded might also be moved to take action to neutralize the threat preemptively, e.g., “exfiltration” of nuclear assets or even nuclear preemption. For more on exfiltration see, Jon B. Wolfsthal, “US Needs a Contingency Plan for Pakistan’s Nuclear Arsenal,” *Los Angeles Times*, October 16, 2001 and Bruce G. Blair “The Ultimate Hatred Is Nuclear,” *New York Times*, October 23, 2001.

⁵⁹ Paul Bracken, “Delegation of Nuclear Command Authority,” in Carter, Steinbruner, and Zraket eds., *Managing Nuclear Operations*, pp. 352-372.

⁶⁰ Bracken, “Delegation of Nuclear Command Authority,” p. 355.

⁶¹ Ibid. See also, Feaver, *Guarding the Guardians*, passim.

⁶² Bracken, “Delegation of Nuclear Command Authority,” p. 355.

3. Command and Control of “Central” Nuclear Forces

The ability to threaten a credible retaliatory nuclear counter-attack is a central pillar of deterrence. Challenges arise, *inter alia*, because the power to authorize retaliation is itself subject to question because no central authority, or effective communication network, may exist to authorize retaliatory nuclear strikes after absorbing an enemies’ (initial) nuclear barrage.⁶³ In other words, since there is usually only one de facto head of state at any given point in time, it will inherently be vulnerable to decapitation. Therefore, to maintain the credibility of the deterrent—to which the ability to launch a retaliatory counter-attack being is central—leadership must consider whether and how to communicate a message authorizing retaliation of its central forces.⁶⁴ Four possibilities present themselves. First, the leadership can choose to ignore this threat. This has historically been difficult because of military pressures for guidance in carrying out their primary mission: defending the country under any circumstances. Second, a leader could insist on placing command and control completely within their person. In this Assertive C2 Configuration, top authority retains absolute nuclear authorization control at all times and does not arrange for a transfer of control. The obvious problem here is that this could invite the destruction of the leader because through their removal (e.g., decapitation) an enemy could incapacitate a state’s entire nuclear arsenal. Furthermore, scholars have pointed out that this type of total personal control is largely anathema to a democracy and does not utilize the military in an optimal way. Bracken contends that “[c]ivilian control over military forces means that [these nuclear forces] belong to the state, not to the individual in office and even to the office itself.”⁶⁵ Similarly, Samuel Huntington notes:

Authority does not inhere in the individual but is an attribute of statutes and position. Authority, consequently, is ordered, structured, or legitimate power. It is a continuing pattern of relationships, which remains relatively constant through successive changes in the individuals involved in the relationships. Its exercise has the sanction of constitution, statute, bylaws, decree, or long accepted custom.⁶⁶

⁶³ One solution to this challenge, explored later in this study, is the adoption of a so-called “launch on warning” (LOW) nuclear posture. In this scenario some or all of a state’s strategic nuclear forces are deployed (e.g., launched and/or scrambled) by proper authority *prior* to nuclear detonations on one’s own soil. See Bruce G. Blair, *The Logic of Accidental Nuclear War* (Washington: The Brookings Institute, 1993), p. 177.

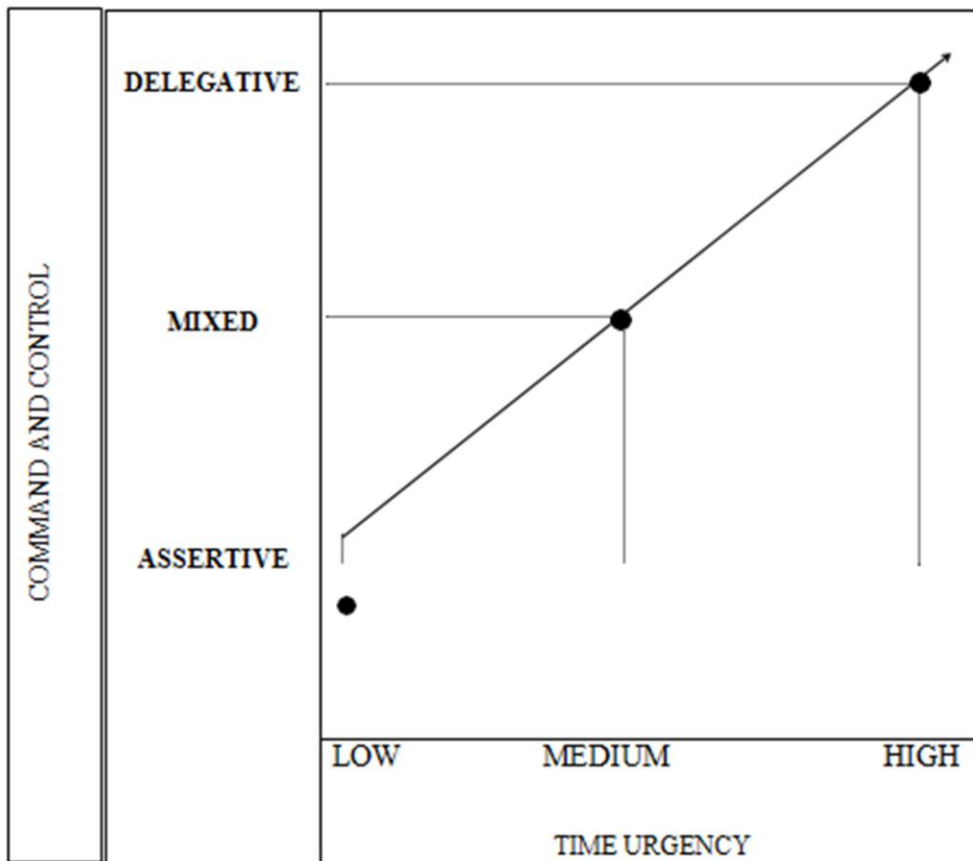
⁶⁴ See, for example, Bruce G. Blair, John E. Pike, and Stephen I. Schwartz, “Targeting and Controlling the Bomb,” in Stephen Schwartz, ed., *Atomic Audit* (Washington, DC: Brookings Institute Press, 1998), pp. 204-209.

⁶⁵ Bracken, “Delegation of Nuclear Command Authority,” p. 359.

⁶⁶ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge: Harvard University Press, 1957), p. 86. Emphasis added.

Third, the top leadership can rely on an established chain of command. Initially, this might seem like a logical solution due to its straightforward legal nature. However, at least two serious problems exist in such a command structure. First, most, if not all, of the successors might inhabit the same geographic area. In the event of a surprise nuclear attack by an enemy, short flight time of missiles or carefully concealed tactical nuclear weapons could ensure the destruction of the entire nuclear chain of command (possibly even with low-yield fission warheads).⁶⁷ Second, post-attack identification of surviving members in the chain of command, or in a parliamentary system assembling the surviving party members to elect another leader, would take valuable time.⁶⁸ The ability to disrupt the ongoing war plan of an attacking opponent could be shattered because as this quest was in progress the state could be subjected to additional nuclear strikes.⁶⁹

FIG. 2: Feaver's Effect of Time Urgency on C³I



Fourth, leaders could authorize some sort of delegation beyond the established chain of command for actualization in dire circumstances.⁷⁰ Due to these inherent limitations associated with reliance on lines of succession, Western analysts have frequently called for such ancillary arrangements. Two of the most frequently envisioned supplementary arrangements are devolution of command and predelegation of command. The former is a smooth transfer of the command function “along a preset chain of command, when the superior in the hierarchy is incapacitated.”⁷¹ The latter refers to an understanding that in the event that predetermined circumstances come to pass, “subordinates in the chain of command can assume that the authorization to use nuclear weapons has been given to them.”⁷² Both cases are similar in that nuclear authority transfers to the military. Consequently, a benefit of devolution of command is its potential to empower those who are most capable of dealing with a nuclear crisis.⁷³ Predelegation of command similarly benefits from authority going directly to military commanders, bypassing the sluggishness of a bureaucracy in a situation where speed is of the essence. However, both of these arrangements carry with them substantial disadvantages. Devolution of command can be undesirable because, to many, the uniquely destructive capabilities of nuclear weapons necessitate that the decision to employ them be made by political leaders only.⁷⁴ Feaver argues that “in a democracy, the military simply do not have the right to make such a decision, regardless of whether those who do have the right decide to cede it to the military.”⁷⁵ Moreover, both devolution and predelegation suffer the threat of what Bracken has called “crazy behavior.”⁷⁶

“Two of the most frequently envisioned supplementary arrangements are *devolution of command* & *predelegation of command*...
...a benefit of devotion of command is its potential to empower those who are most capable of dealing with a nuclear crisis.”ⁱ

ⁱ Feaver, *Guarding the Guardians*, p. 44.

⁷⁰ This is the route that Iraqi leader Saddam Hussein, albeit with chemical weapons, claimed to have taken at least as early as April 1990. Fearing a Israeli nuclear decapitation strike he warned a visiting delegation of US senators:

“I repeat now, in your presence, that if Israel strikes, we will strike back. I believe that this is a fair stand. A stand know in advance is what helps peace....For if Israel realizes it will be struck, it might refrain from striking....If Israel uses atomic bombs, we will strike at it with the binary chemical weapon....we have given instructions to the commandeers of the air bases and the missile formations that once they hear Israel has hit any place in Iraq with the atomic bomb, they will load the chemical weapon with as much as will reach Israel and direct it at its territory. *For we might be in Baghdad holding a meeting with the command when the atomic bomb falls on us. So, to make the military order clear to the air and missile base commanders, we have told them that if they do not receive an order from higher authority and a city is struck with an atomic bomb, they will point toward Israel any weapons capable of reaching it.*”

As quoted in Timothy V. McCarthy and Jonathan B. Tucker, “Saddam’s Toxic Arsenal,” in Lavoy, Sagan, and Wirtz, eds., *Planning the Unthinkable*, p. 58. Emphasis added.

⁷¹ Feaver, *Guarding the Guardians*, p. 44.

⁷² Ibid.

⁷³ In the case of the United States, A brief review of the above presidential successors illustrates this advantage. Feaver observes that in a nuclear crisis it is arguably more prudent to have the JCS chairman in charge than the secretary of the interior. Ibid, p. 45.

⁷⁴ Ibid, p. 47.

⁷⁵ Ibid, emphasis in the original.

⁷⁶ Bracken, “Delegation of Nuclear Command Authority,” p. 369. Emphasis added.

This condition could arise, Bracken argues, because nuclear authority could likely involve “a transfer from the civil to *many* military sectors, creating difficult if not impossible conditions for ending the war.”⁷⁷

4. Command and Control of “General” Nuclear Forces

To this point the discussion of delegation has revolved around how to insure that an opponent’s massive nuclear strike is credibly deterred and, in the event of deterrence failure, how to respond to a nuclear attack from the state’s central—strategic—forces. At least three situations can occur, however, where a state might find that predelegation of its general (e.g., tactical) forces would also be prudent.⁷⁸ First, commanders of forces that are deployed in a foreign theatre (or, in the case of conflicts that involve irredentist claims, in or near a disputed area such as Kashmir) may need to respond immediately to an enemy’s overwhelming use of force in order to maintain control of “high value” areas. Second, military forces operating in any theatre might be so overwhelmed that their very survival depends on the immediate use of tactical nuclear weapons. Finally, forces at sea might face a situation in which they have overwhelming evidence that an enemy naval fleet is planning their immediate destruction with nuclear devices. As in the previous scenario, their survival might depend on an immediate use of nuclear weapons. All three scenarios for the predelegation of general nuclear weapons have key similarities. First, all envision the use of nuclear weapons against counterforces⁷⁹ only. Consequently, it is putatively assumed that the threat of escalation is diminished in such scenarios. Moreover, all three cases assume that time is of essence.

5. Other Disadvantages to Predelegation

In short, the predelegation of authority for nuclear weapons may find justification when a state seeks to deter against a bolt-out-of-the-blue massive nuclear attack and in certain tactical situations that might arise. However, as noted earlier, there are several disadvantages to predelegation; one of the most profound lies with nuclear war termination. This scenario envisions government leaders, after some degree of nuclear exchange has already occurred, seeking to negotiate a settlement with their opponents. Negotiation leverage could include threatening to employ more weapons if hostilities do not cease, or agreeing to cease all hostilities in exchange for war termination. In the first case, countervalue targets could be specified for destruction only as a last resort and, therefore, could be used as a critical bargaining tool. With predelegation, enacted during a communications outage, local commanders might follow through with launching weapons, oblivious to unforeseen developments necessitating the need to keep the countervalue option indefinitely in order to negotiate a settlement or to deter an opponent’s strike on their own cities.⁸⁰

Illustrating a second related example of the negative side of predelegation are events within the administration of President Jimmy Carter. The Presidential Succession Act of 1947 ensured that political officials in the chain of presidential succession would possess the codes necessary to identify themselves as the commander in chief. However, with the exceptions of Vice President Walter Mondale and Secretary of Defense Harold Brown, President Carter reportedly withheld these codes.⁸¹ Bruce Blair asserts that by “thwarting a legitimate presidential successor’s ability to identify himself or herself properly as commander in chief during a crisis, Carter’s action would have greatly weakened the functioning of the presidential successor system while empowering the military commanders picked to have predelegated nuclear

⁷⁷ Ibid, emphasis in the original.

⁷⁸ “Central” in this sense also implies armies, navies, and air forces, which are likely to be the first point of contact in any conflict. They are routinely assembled in forward operations, where they directly face enemy troops.

⁷⁹ In nuclear war-fighting parlance “countervalue” generally refers to population centers; “counterforce” refers to military and governmental targets (e.g., nuclear missile silos).

⁷⁹ Contrary to popular belief these authorization codes did not “enable” those portions of the US arsenal restrained by locks (such as PALs). “The national military command center themselves actually held the launch authorization codes that would have been sent to the firing units.” Blair, *The Logic of Accidental War*, (1985) p. 50.

⁸⁰ Blair, *The Logic of Accidental War*, (1985) p. 50.

authority.”⁸² In other words, as a theoretical crisis progressed, tensions mounted, and no legitimized guidance from a presidential successor emerged, a regional command officer might have felt compelled to act out their predelegative responsibilities (real or cognitively inferred during the crisis) despite the existence of a surviving chain of command.⁸³

6. Option Three: Pre-Determined Command and Control

In the course of this project, researchers identified a third command and control option: Pre-Determined.⁸⁴ In this case nuclear decision-makers develop a nuclear strategy that follows a preplanned script. Operatives carrying out such a pre-determined operation are to continue on with the plan despite *any* changes that might occur during its execution. More on Pre-Determined directly below.

7. Review of the Three Broad Command and Control Options

- **ASSERTIVE:** “Assertive” is defined as a command system in which the leadership maintains control (either in person or, more likely, through obedient subordinates in contact with the leadership from the field) over relevant aspects of the operation (e.g., in the context of nuclear weapons, in the weapon’s transportation and detonation). While preplanning may have occurred, alterations in the strategic environment allow for the leadership to make changes “on the fly.” For example, missions can be called off altogether or adjustments can be made in targeting; however, all such modifications can only be initiated by the leadership. Moreover, “assertive” arrangements can require that in-the-field subordinates must contact leadership at every step of the mission to receive further instructions (e.g., they may not even know that they are transporting a nuclear weapon and what the target is prior to some point within the mission itself [by the way, apart from the plane’s pilot, this was the case for the *Enola Gay*’s Hiroshima mission]).
- **DELEGATIVE:** “Delegative” is defined as a system in which the leadership has empowered subordinates to make key decisions if necessary in the conduct of the operation (in the nuclear context, this would refer mainly to the weapon’s transport, targeting and detonation). In this case, the leadership may maintain assertive control over the weapon with authorization (e.g., devolution) of command given to subordinates in the event of certain predefined occurrences (for example, if deputies in the field lose communication with the leadership). Moving farther along the spectrum of delegation, leaders may simply allow deputies to act as they see fit in the field as the mission progresses (e.g., the football term of “make an audible” – when a quarterback makes a change of play at the line of scrimmage based on what the defense is showing).
- **PRE-DETERMINED:** “Pre-determined” is defined as *preassigned* protocols and instructions given to group personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon). Pre-determined in this context means

⁸¹ Ibid, p. 51.

⁸² Mindful of the risk of posed by communication outages erroneously leading predelegated military authorities to actualize nuclear weapon employment plans, leaders can take measures to forewarn regional commanders. One example of this is the 1973 nuclear alert, enacted during the 1973 Arab-Israeli war. Soviet leader Leonid Brezhnev sent a message to President Nixon proposing joint intervention to enforce a cease-fire (saving Egypt’s Third Army) and threatening a unilateral Soviet military intervention if his offer was refused. Absent the president, who was reportedly drunk, Secretary of State Henry Kissinger and the President’s senior advisors decided to decline Brezhnev’s invitation and responded by heightening the US forces alert status to DEFCON 3 (for the first time since 1962) as a show of “resolve” designed to check any Soviet military advancements towards the Middle East. While the conflict ended without Soviet intervention, US nuclear forces in the region, specifically the commander and chief of the Pacific (CINCPAC), understood that the threat was not serious because the instructions received ordered CINCPAC “not to take any alert measures that would incur economic costs, such as generation of nuclear forces undergoing overhaul at the time.” Janne E. Nolan, *Guardians of the Arsenal* (New York: Basic Books Inc., 1989), p. 122. It is important to note that Kissinger, as secretary of state, would have been fourth in line to give out nuclear authorization codes.

⁸³ This insight came from Gary Ackerman.

that group personnel responsible for transport, operational security and detonation of the weapon must strictly adhere to prearranged operational behavior *regardless* of events that transpire in the field (although, obviously, pre-planned behavior can anticipate certain events and allow for pre-planned actions in response). In short, in this “pre-determined” environment, personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon) are acting as pre-programmed (nuclear-armed) automatons. None of their actions, insofar as they have control over them, should run counter to the leadership’s pre-conceived plan of how events can and should play out.

B. Theories of State Nuclear Command and Control

Having established the basic concepts of state nuclear command and control—the always/never dilemma and options for addressing it via assertive, predelegative or predetermined arrangements—this study now considers three open-source theoretical explorations of those factors deemed sufficient and/or necessary to determine the ultimate configuration of nuclear command and control.

1. Nuclear Postures

Theorists have attempted to link command and control arrangements to extant nuclear postures (e.g., de facto employment postures, as opposed to *declared* nuclear postures⁸⁵).⁸⁶ From the perspective of command and control, nuclear posture is most influenced by the timing of nuclear weapons employment: early or late use. As noted earlier, assertive control is less conducive to early use than is decentralized control. This is evident when considering three basic postures. First, the most widely recognized nuclear posture is *assured destruction*. In this case, a given nuclear power seeks to deter a strategic nuclear strike from an opponent via a secure second-strike nuclear capability (i.e., the initially attacked state could, theoretically, absorb a full-scale nuclear attack and still respond in kind).⁸⁷ What is noteworthy for the purposes of this study is that the originally attacked state need not respond immediately; it only needs to assure *eventual* retaliation. Decapitation is less of a threat because of the notional emergence of an eventual leader that could authorize retaliation. Thus, if a second strike capability exists, control of nuclear weapons, and the authority to use employ them, can be tightly controlled by a state’s central leadership and allow for less pressure for predelegation.⁸⁸

In contrast, the second posture, *asymmetric escalation*, is oriented toward a *first-strike* use of nuclear weapons, typically as a rapid and asymmetrical response to overwhelming conventional military advancements. Such a response can be to military gains made by a revisionist state or to counter military setbacks encountered during a state’s own aggressive behavior. In the former case, states credibly seek to deter conventional military encroachments. Such a posture traditionally necessitates equipping front-line

⁸⁵ Although treated as an independent variable in this study, Feaver points out that nuclear doctrine too (“doctrine” here is understood to have the same basic meaning as “posture”) is dependent on “[d]evelopments in the arsenal, changes in the perceived threat,” and leadership style. However, once established, Feaver notes, “doctrine develops its own policy inertia, giving it an independent influence on [centralized] control. Doctrine can lag behind changes in the threat, and sometimes the inertia is strong enough to delay or resist innovations prompted by changes in [leadership].” Feaver, *Guarding the Guardian*, pp. 77-78.

⁸⁶ See, for example, Vipin Narang, “Posturing for Peace? Pakistan’s Nuclear Posture and South Asian Stability,” *International Security*, Vol. 34, No. 3 (Winter 2010); and Timothy D. Hoyt, “Pakistan’s Nuclear Deterrence and the Dangers of Strategic Myopia,” *Asian Survey*, Vol. 41, No. 6 (Nov-Dec, 2001), 960. The literature on nuclear postures is immense. For a good summary see, Lawrence Freedman, *The Evolution of Nuclear Strategy* (London: Macmillan, 1989).

⁸⁷ As is evident, these models approach nuclear postures in a broad and limiting fashion. For example, they do not explore extended deterrence or preemptive nuclear doctrines.

⁸⁸ As will be seen later in this study, this is presently the posture of India vis-à-vis China and, in some form, Pakistan (recall that this posture addresses the threat of large strategic nuclear strikes by one’s opponent(s)).

forces with nuclear weapons and, usually, the authority to employ such weapons in a timely manner. Additionally, if the impinging state possesses a nuclear capability, it may also require a secure second-strike nuclear capability to deter that opponent's potential nuclear retaliation. Similarly, states that seek to alter the status quo via military means may seek to hide behind a nuclear shield with the hopes of extracting concessions. Taken as a whole, the asymmetric escalation posture, notes nuclear posture critic Vipin Narang, "is the most aggressive option available to nuclear states."⁸⁹ States that employ this posture, Narang continues, "are often those that face extremely binding security constraints and therefore have little choice."⁹⁰

The final broad nuclear posture determining command and control is *catalytic*. Such a posture is largely political in nature; it is aimed at "catalyzing" a third party into a crisis, either through diplomatic or military intervention. In such a scenario, a more powerful third party state, concerned over the potential use of nuclear weapons in a regional crisis, intervenes to deescalate the situation. Such a posture allows for a highly centralized command and control arrangement. The mere possibility of nuclear capability (e.g., one that has not been demonstrated via a yield bearing test) might be perceived as sufficient to achieve the political goal of intervention.⁹¹

2. International Relations Theory

Organization Theory: Pressures for a Decentralized Command and Control

Simply put, organization theory sees the establishment of any "important policy issue" as being determined by no single group: "Government leaders can substantially disturb, but rarely precisely control, the behavior of [an organization], which is determined primarily by routine operating procedures, with seldom more than gradual, incremental deviations except when a major disaster occurs."⁹² Bureaucratic theory is based on this general basis of organization theory, but rather than presupposing direction or formulation of policy by top leaders, presumes intense "competition among the decision making units, and the formulation of...policies as the result of bargaining among the components of the bureaucracy."⁹³

Nuclear historian and political scientist Scott Sagan brings these two theories together in his writings on organization theory. It is important to note that Sagan sees the inherent contradictions that a large organization faces in pursuing multiple, often time paradoxical goals, as causing the leaders of sub-organizations to seek as much control as possible to assure that *their* goals are met.⁹⁴ Therefore, organization theory predicts that over time a state's military will lobby increasingly hard "for both an independent *capability* and the *authority* to use any and all weapons in the state's arsenal."⁹⁵ In addition to geopolitical exigencies that highlight the role of the military, determining the outcome of such a struggle is the overall role of the military in a state's ruling apparatus. States where military officers hold power and dictate or influence policy, or in situations where "they exert strong influence through political and bureaucratic maneuvering," are prone to a more delegative nuclear command system.⁹⁶

⁸⁹ Narang, "Posturing for Peace?"

⁹⁰ Ibid. This is the posture now utilized by Pakistan vis-à-vis India. See, for example, Ibid, and Hoyt, "Pakistan's Nuclear Deterrence and the Dangers of Strategic Myopia."

⁹¹ As explored below, South Africa and Pakistan have both utilized this posture.

⁹² Ibid, p. 572.

⁹³ Ibid.

⁹⁴ Scott D. Sagan, "The Origins of Military Doctrine and Command and Control Systems" in Peter R. Lavoy, Scott D. Sagan, and James J. Wirtz, eds., *Planning the Unthinkable* (Ithaca and London: Cornell University Press, 2000), p. 37. For more on Sagan's organization theory see Scott D. Sagan, *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton: Princeton University Press, 1993).

⁹⁵ Sagan, "The Origins of Military Doctrine Command and Control Systems," p. 37. Emphasis in the original.

⁹⁶ Ibid, p. 39.

Realism: Command and Control Arrangements Conform to Strategic Environments

While Realism does not *assume* rationality, it posits an international system that rewards rational behavior and severely penalizes its absence in state behavior.⁹⁷ Rational state behavior in an anarchic international system necessitates that emerging states emulate the behavior of successful states in terms of, *inter alia*, technologies and military doctrines. Thus, successful nuclear command and control is, for Realists, anchored to a state's extant strategic environment and, consequently, is predictable.⁹⁸ First, assertive nuclear command and control systems emerge in states where competitors possess conventional weapons only.⁹⁹ Second, if a state's enemies *do* possess unconventional weapons, assertive control will remain the norm if decapitation is not a threat (e.g., leadership centers are out of range of an enemy's weapons and unconventional weapon types, namely radiological weapons, are not deemed an existential threat to leadership).

In contrast, Realism dictates that a delegative command and control apparatus is required under three broad circumstances. First, if the state is engaging in status quo altering military engagements, prompt use of nuclear weapons may be necessary to reverse unfavorable battlefield momentum or, ultimately, to force an opponent into capitulation. Second, if a state does not have a secure second-strike nuclear force, it would need to employ a launch on warning (LOW) posture in order to deter a potential nuclear first-strike by an opponent. Finally, even if a secure second-strike capability was in place, leaders might still feel obligated to predelegate command if they believed that political leadership command centers were vulnerable to attack. In short, the application of Realist theory to nuclear command and control results in logical arrangements that conform to clear-eyed threat assessments. It notably differs from the organizational theory in its assumption that the state acts as a unified whole to achieve goals, as opposed to a nuclear posture arising from turf battles that may or may not serve the state's collective security needs.¹⁰⁰

⁹⁷ See, for example, See Randall L. Schweller, "The Progressiveness of Neoclassical Realism," in Elman and Elman, eds., *Progress in International Relations Theory*, p. 324 and Kenneth N. Waltz, *Theory of International Politics* (Long Grove, Illinois: Waveland Press, 1979), pp. 76-77; and Brian Rathbun, "A Rose by Any Other Name: Neoclassical Realism as the Logical and Necessary Extension of Structural Realism," *Security Studies*, Vol., 17, No. 2 (2008), p. 305.

⁹⁸ Realist predictions for nuclear command and control are similar to those made that posit "nuclear doctrine" as a good indicator (as explored earlier). However, Realism places a greater emphasis on rationality, emulation and, at time, innovation. The nuclear doctrines explored earlier are not *a priori* bound to an international system that rewards rational behavior or emulation of successful state actors.

⁹⁹ Sagan, "The Origins of Military Doctrine Command and Control Systems," p. 39.

¹⁰⁰ Note that Neo-Classical Realism accounts for different actors within a state.

Strategic Culture Theory

Theorists increasingly point toward subjective culturally influenced myths, narratives, and norms as indicative of command and control structure.¹⁰¹ Sagan argues that cultural variations are manifest in the acceptability of highly central leadership or, in contrast, “some form of checks-and-balances system.”¹⁰² Depending of which system is considered “normal” by a state, command and control will veer toward either assertive or delegative arrangement respectively.¹⁰³ Additionally, Sagan argues that “command systems can reflect internal political struggles and the state’s mechanisms for political succession.”¹⁰⁴ Thus, leaders fearful of a military coup are likely to apply tight control over the military and any state RN weapons. Significantly, Sagan continues, “A state leader also could be concerned that issuing predelegated use authority to a military commander or another civilian authority *would serve to identify his or her successor.*”¹⁰⁵ Control over RN weapons may “symbolize the highest political authority in the state,” Sagan contends.¹⁰⁶ If that is the case, “then predelegation of weapons release authority would signal who was next in line.”¹⁰⁷ Indeed, during the Cold War, Stephen Meyer noted, “Many students of Soviet politics believe that the Soviets may have avoided predelegation of highest authority precisely because it could imply political succession rights during regular political transitions.”¹⁰⁸

Advocates of strategic culture see its impact on Soviet nuclear posture and strategy in two additional areas. First, Soviet nuclear policies and abilities reflected several centuries of Kievan, Muscovite, and then Imperial Russian history. The Muscovite and Czarist states never had to probe far for enemies, and the cost of defeat was often catastrophic for large populations. Warfare for Russia, as a centrally placed continental power with no natural defenses other than sheer distance and brutal winters, always had the potential of being a *total*

Edgar Schein

The Organization’s
Identity is Determined
Largely by a Group’s Tacit
Assumptions—the Unseen
Elements of a Group’s Culture

The organizational cultural model created by the influential organizational psychologist Edgar Schein dictates that outsider discernment of the true nature of an organization—its resolution of the problem of external adaptation and internal integration (e.g., how a VNSA might configure their nuclear command and control)—is not possible through examination of its visible behavior, its statements or its creed.¹ Similarly, fundamental elements of the organization’s identity are not accessible with an understanding of its stated values and attitudes. Rather, according to Schein, the underlying and driving elements that determine the organization’s identity are determined largely by a group’s tacit assumptions—the unseen elements of a group’s culture that are often unspoken. In short, some branches of organizational and leadership studies imply, the best way to predict the types of complex and novel interactions inherent in a VNSA’s nuclear command and control is to go beyond the clues offered by cultural artifacts and its professed organizational nature; true organizational apprehension is only possible through an understanding of unstated, often taboo, assumed rules and “norms” of behavior.

Edgar Schein, *Organizational Culture and Leadership*, 4th Ed. (San Francisco: Wiley, 2010), passim.

¹⁰¹ See, Colin S. Gray, *National Security and National Style* (Lanham, MD: Hamilton Press, 1986); and Sagan “The Origins of Military Doctrine Command and Control Systems,” pp. 42-45.

¹⁰² Sagan “The Origins of Military Doctrine Command and Control Systems,” p. 42.

¹⁰³ Ibid, pp. 42-43.

¹⁰⁴ Ibid, p. 43.

¹⁰⁵ Ibid. Emphasis added.

¹⁰⁶ Ibid, p.43.

¹⁰⁷ Ibid, p. 43.

¹⁰⁸ Steven M. Meyer, “Soviet Nuclear Operations,” in Carter, Steinbruner, and Zrakets eds., *Managing Nuclear Operations*, pp. 485-486.

experience.¹⁰⁹ Consequently, Soviet planning for nuclear war, as heirs to this distinct experience, always foresaw it as a *total* conflict.¹¹⁰ Secondly, the Soviet leadership saw war, in any form, as something that was a *survivable* experience.¹¹¹ Past military experiences, from the Mongols, to Napoleon, to the Nazis, had left Russia with a sense that, even with catastrophic loss of life, war could be won. Damage limitation was a nonnegotiable concept. This perspective lent itself to Soviet efforts in developing post-attack command and control system that would insure that the Kremlin maintained a continuity of government during a nuclear war.¹¹²

By contrast, according to strategic culture theory, the United States' nuclear posture and command and control system during the Cold War was a reflection of an entirely different strategic culture. First, there is an expectation in America of safety as the norm.¹¹³ This stems from the geographic fact of insularity. For an insular power to take the decisive step to go to war, the foreign threat has to be determined to be *immediate*.¹¹⁴ Evidence of this can be seen in the mercurial manner in which the US government traditionally appropriated funding for defense. Whereas the Russians accepted war as normal and always possible, attempting to maintain their military accordingly, Americans tended to mobilize their defenses only when an immediate threat was seen. Most importantly, it follows that when this cultural proclivity—the assumption of peace as normal—was confronted with an unambiguous major threat, the result was, some argue, *disproportionate* military responses.¹¹⁵ Finally, a review of American history reveals that the idea of *limited warfare* (i.e., war not fought on native soil) has firmly entrenched itself into the American psyche, manifesting itself in the Cold War into the idea of a limited nuclear war.¹¹⁶

¹⁰⁹ The destruction wrought by the Mongols in the early thirteen century is a good example. See James Chambers, *The Devil's Horseman: The Mongol Invasion of Europe* (New York: Atheneum, 1979).

¹¹⁰ For more on the Soviet perspective of total war see Gray, *Nuclear Strategy and National Style*, chap.2. See also Joseph D. Douglas, Jr. and Amoretta M Hoeber, *Soviet Strategy for Nuclear War* (Stanford University, Stanford, California: Hoover Institute Press 1979).

¹¹¹ See Dan L. Strobe and Rebecca V. Strobe, "Diplomacy and Defense in Soviet National Security Policy," *International Security*, Vol., 16, No. 2 (Fall 1993), pp. 91-116.

¹¹² For an insightful analysis of Soviet views of nuclear victory, see Robert Arnett, "Soviet Attitudes Toward Nuclear War: Did They Really Think They Could Win?" *The Journal of Strategic Studies*, Vol., 17, No. 2 (September 1999), pp. 172-91.

¹¹³ See Gray, *Nuclear Strategy and National Style*, cp. 2. Note too that a historical narrative that emphasizes surprise attacks (e.g., the USS *Maine* explosion in 1898, Pearl Harbor and 9/11) can precipitate extreme "sensitivity to, and perhaps even [obsession] with, concerns about surprise counterforce and decapitation attacks. Such fears could lead state leaders to maintain high military alert levels in peacetime and would encourage the delegation of launch authority for unconventional weapons." Sagan "The Origins of Military Doctrine Command and Control Systems," p. 44. Sagan notes that "This phenomenon could be called 'strategic hormephobia': a collective form of the 'fear of shock' phobia that some individuals experience." Ibid. What Sagan describes is similar in many respects to "failed enactment" described in Robert Jay Lifton, *Superpower Syndrome: America's Apocalyptic Confrontation with the World* (New York: Nations Book, 2003).

¹¹⁴ See Ken Booth, "American Strategy: The Myths Revisited," in Ken Booth and Moorhead Wright, eds., *American Thinking about Peace and War* (Hassocks, Sussex: Harvester, 1998), pp. 1-35.

¹¹⁵ To see the effect that this had on nuclear planning see the works of David Alan Rosenberg, one of the first researchers to publically disclose US strategies for nuclear war in the early atomic era. See esp. D.A. Rosenberg, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960" *International Security*, Vol., 7, No. 4 (Spring 1983), pp. 3-71; and D.A. Rosenberg, "A Smoking Radiating Ruin at the End of Two Hours: Documents on American Plans for Nuclear War with the Soviet Union, 1954-1955" *International Security*, Vol., 6, No. 3 (Winter 1981/82), pp. 3-35. For further insight into the early American nuclear war plans, see Scott D. Sagan, SIOP-62: "The Nuclear War Plan Briefing to President Kennedy" *International Security*, Vol. 12, No. 1 (Summer 1987), pp. 22-51.

¹¹⁶ For a study of US military and cultural acceptance of limited war, see Michael Ignatieff, *Virtual War* (New York: Metropolitan Books, 2000), pp. 161-215. For a summary of the intellectual foundations surrounding limited nuclear war, see Bernard Brodie, "Unlimited Weapons And Limited War" *The Reporter*, Vol. 2, Issue 9 (Nov. 1954), pp. 16-21.

3. Civil-Military Relations and the Time-Urgency Quality of the Nuclear Arsenal

Open sources most frequently identify “civil-military relations” and “time urgency” as paramount independent variables influencing a state’s command and control arrangements. However, four other independent variables have also been identified:

- **Arsenal Size and Dispersal:** Assertive control lessens and delegative control increases as a state’s nuclear arsenal grows in size and dispersal.¹¹⁷
- **Perceived Vulnerability:** Two discrete and opposing outcomes can result. First, delegative control measures can increase with increased threat perception. Second, a heightened crisis environment will precipitate increased civilian interest in nuclear command and control and, consequently, there will be a shift toward greater assertive control.¹¹⁸
- **Leadership Style:** “Administrative style in other issue areas will be replicated in the control of nuclear operations; thus, changes in administration will precede and precipitate shifts in assertive and delegative control.”¹¹⁹
- **Organizational Constraints:** Enhanced nuclear use-control technologies (e.g., permissive access links, or PALS) allow for greater assertive control and are likely to lead to greater reliance on assertive control.¹²⁰

Civil-Military Relations and Time Urgency

Feaver makes two postulates that he believes can determine the likelihood of a system conforming to either the delegative or assertive rubric. First, he posits that, “the more stable civil-military relations, the more delegative the command and control system; the more volatile the civil-military relations, the more assertive the command and control system.”¹²¹ Stability in this sense implies, in part, a pattern where the military is institutionally strong but abstains from direct involvement in political affairs. A pattern of respect and trust leads to a military more demanding of, and civilian authorities more inclined toward, delegative authority. States that have civil-military relations marked by volatility, such as a history of military coups, may be totalitarian or have a history of civil-military conflict.

¹¹⁷ Peter D. Feaver, *Guarding the Guardians: Civilian Control of Nuclear Weapons in the United States* (Ithaca: Cornell University Press, 1992), p. 73. Note that all of Feaver’s independent variables are drawn from study of US command and control arrangements. See also, Bruce G. Blair, *Strategic Command and Control: Redefining the Nuclear Threat* (Washington, DC: The Brookings Institute). Blair bases his conclusion largely on US command and control arrangements, however he does consult Soviet models as well.

¹¹⁸ Feaver, *Guarding the Guardians*, p. 76. This variable is sometimes subsumed by “time urgency.” See Feaver, “*Command and Control in Emerging Nuclear States*,” p. 174, footnote 28.

¹¹⁹ Ibid, p. 80. This variable can also sometimes subsumed under “civil-military relations.” “*Command and Control in Emerging Nuclear States*,” p. 174, footnote 28. Feaver notes that, “there is no reason to expect [an assertive or delegative] change at any time other than during or just after a change in administration.” Ibid, footnote, p. 20.

¹²⁰ See Ibid, p. 82. See also Peter Stein and Peter Feaver, *Assuring Control of Nuclear Weapons: The Evolution of Permissive Action Links* (Lanham, MD: University Press of America, 1987), and Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton: Princeton University Press, 1989).

¹²⁴ Feaver, *Command and Control in Emerging Nuclear Nations*, p. 178. It is important to note that Feaver considers both of these postulates “sufficient” to dictate the type of command and control system employed but not “necessary.” Feaver asserts that “[n]ecessary conditions, as the phrase implies, are conditions that must obtain [sic] for effect to be seen; however, necessary conditions may not, by themselves, be enough to cause the effect. Sufficient conditions, in contrast, are not essential but, if present, are by themselves enough to generate the outcome. See, Feaver, *Guarding the Guardians*, p. 70.

Secondly, Feaver theorizes that, “the greater the time-urgency, the more likely the command and control system will be delegative.”¹²² Time urgency refers to how quickly an arsenal can be made ready for rapid and immediate use. Some key factors here are the size of the state’s arsenal and its proximity to the threat, risk of high precision weapons in the enemy’s arsenal (leading to increasing odds of decapitation), and, among others, lack of “geographic depth” in which to situate an arsenal.¹²³ Such physical circumstances might drastically reduce deployment options exposing the few available locations to enemy surveillance. In this case a state might be prudent to quickly release its arsenal (e.g., via the use of predelegation) before the enemy destroys it.

Table 1: Civil-Military Relations and Time Urgency

Independent Variables	Command System Outcomes	Protects Against	Failure Mode
Civil-military relations: <i>good</i>	Delegative	Decapitation	Fail deadly
Civil-military relations: <i>bad</i>	Assertive	Accidental and unauthorized use	Fail impotent or fail safe
Time urgency: <i>Immediate</i>	Delegative	Decapitation	Fail deadly
Time urgency: <i>Nonessential</i>	Assertive	Accidental and unauthorized use	Fail impotent or fail safe

¹²⁵ Blair, *The Logic of Accidental Nuclear War*, p. 49

¹²³ It should be noted that this time period (post WW II) and the one that follows (the late 1950s) are used because the documents necessary to understand the delegative or assertive nature of the command and control system have been declassified. After the mid-1960s, the lack of declassified documents prohibits any definitive conclusions.

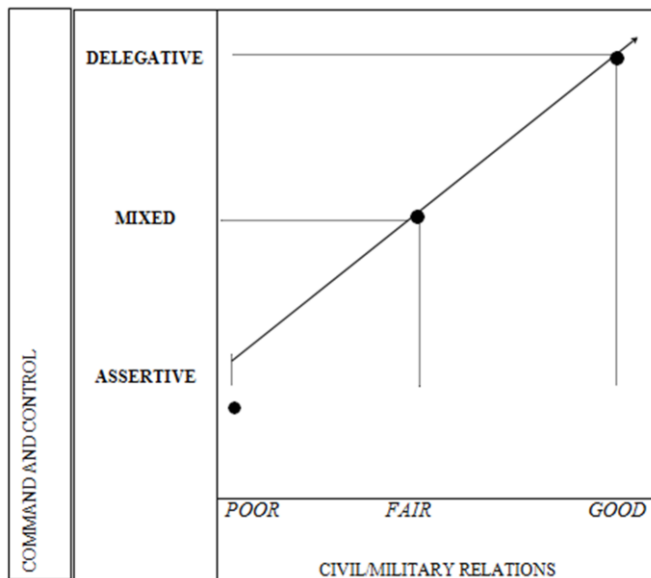
FIG. 1: Feaver's Effect of Civil Military Relations on C³I

Figure 1 is drawn from , Blair, "Theory and Practice of the Delegation of Nuclear Command and Control," p. 27.

C. Historical Examples of State Nuclear Command and Control

1. United States¹²⁴

US Nuclear Postures

The United States has had a variety of nuclear postures since 1945; broadly speaking, they consist of the well-known assured retaliation and, less appreciated, asymmetric escalation postures.¹²⁵ The former, requiring a secure second-strike capability, was arguably not fully possible until the advent of US nuclear-tipped ballistic missile submarines (SSBNs) in the early 1960s.¹²⁶ The latter has also been a feature of US nuclear policy since the late 1940s when American policy-makers sought to deter Soviet military aggression in Western Europe.¹²⁷ However, unlike the asymmetric

¹²⁴ From 1945 to 1996, the United States spent \$254 billion (in constant US dollars) on command and control of its nuclear weapons. For the 1996 figure, see Blair, Pike, and Schwartz, "Targeting and Controlling the Bomb," p. 198. Schwartz's exhaustively researched 1996 figure (\$182 billion) was adjusted to 2010 purchasing power (\$254 billion) using the US Bureau of Labor Statistics (BLS) calculator. Available at: <http://data.bls.gov/cgi-bin/cpicalc.pl>. These costs are in addition to others associated with the US nuclear weapons program, e.g., building, deploying, targeting, and dismantling the bomb along with nuclear waste management and environmental remediation. Total costs, from 1940 to 1996, in total amount to more than \$8.1 trillion dollars (in constant 2010 dollars). See Schwartz, *Atomic Audit*.

¹²⁵ Regardless of US declared or de facto US nuclear policy—be it "massive retaliation," "flexible response," or "protracted nuclear war fighting,"—from 1945 to present, all of them seek to "develop technologies and plans to make nuclear weapons usable for military objectives." Nolan, *Guardians of the Arsenal*, p. 5.

¹²⁶ Initially armed with sixteen Polaris A-1 submarine-launched ballistic missiles (SLBMs), the USS George Washington departed on its first patrol on November 15, 1960. "Destruction" is a relative term. Traditionally, the US quantified it as a percentage of destroyed Soviet infrastructure. In December 1963, Secretary of Defense Robert McNamara and his "Whiz Kids" calculated that the Soviets would be sufficiently deterred if [the US] could kill 30 percent of their population and destroy half of their industrial capacity... Fred Kaplan, *The Wizards of Armageddon* (Stanford: Stanford Press, 1983), p. 317. In 1974, Secretary of Defense James Schlesinger directed that the SIOP (the so-called "Single Integrated Operational Plan"—the US nuclear targeting and employment blueprint) "be able to destroy 70 percent of the Soviet industry that would be needed to achieve economic recovery in the event of a large-scale strategic nuclear exchange." As quoted in Bruce G. Blair, John E. Pike, and Stephen I. Schwartz, "Targeting and Controlling the Bomb," in Stephen I. Schwartz, ed., *Atomic Audit* (Washington, D.C: Brookings Institute Press, 1998), p. 203. It should be recalled, however, that assured retaliation could be achieved if a state adopts a launch on warning (LOW) policy. Such a policy, eventually adopted by both the USSR and the US, does not require a second-strike capability; forces can be released before the enemy's initial nuclear assault arrives.

¹²⁷ George Kennan's "X" article in *Foreign Affairs* (July 1947) makes no mention of atomic bombs; until 1948, US diplomatic thinking was to treat the bomb as a weapon of last resort. (Kennan's articles argued that "the Soviet Union was governed by an intrinsically expansionistic ideology, and that the United States must adopt 'a long-term, patient but firm and vigilant containment of Russian expansive tendencies.'" Kaplan, *The Wizards of Armageddon*, 33.) However, with the Berlin Crisis of 1948, growing independence from overseas airbases due to the long-range bomber capabilities of the new B-36 bomber, and a growing nuclear arsenal (bolstered by more efficient use of fissionable materials as demonstrated in the nuclear tests of 1948), the bomb, by 1948, was a first-use weapon in the European theatre. See, Freedman, *The Evolution of Nuclear Strategy*, Chapter 4.

escalation posture employed at times by Israel and Pakistan, for example, US asymmetric escalation was predicated largely on the defense of non-contiguous US interests—Western Europe. In more recent years, US threat of nuclear asymmetric escalation has also been linked to an adversary's use of chemical and biological weapons and “in the event of surprising [conventional] military developments.”¹²⁸ As a result of these two overlapping postures—requiring at times either late or early employment of nuclear weapons—one would expect the US to employ both a centralized and a delegative command and control system.¹²⁹

¹²⁸ William Arkin, “Secret Plan Outlines the Unthinkable,” Los Angeles Times, March 10, 2002. For a full accounting of US nuclear missions against non-nuclear states, see Charles P. Blair and Jean P. du Preez, “Visions of Fission: The Demise of Nuclear Negative Security Assurances on the Bush Administration's Pentomic Battlefield,” *Nonproliferation Review*, Vol. 12, No 1, March 2005.

¹²⁹ The US asymmetric escalation posture necessitated the development of sophisticated low-yield nuclear warheads and delivery systems. The nuclear devices used on the cities of Hiroshima and Nagasaki, Japan had respective yields of 16 kilotons and 22 kilotons. In contrast, the smallest and lightest nuclear warhead ever developed by the United States had a yield between .01 and .02 kilotons. Indeed, while the Cold War public generally came to view nuclear weapons as assured destruction multi-megaton “city-busters,” US weaponeers, throughout the 1950s and 1960s quietly fielded several low-yield nuclear weapons to bolster the asymmetric escalation posture. Best known of these devices was the MK54. At its lowest yield—.01-.02 kilotons—this bomb had a destructive power that was two to four times greater than the ammonium nitrate bomb that destroyed the Alfred P. Murrah Building in Oklahoma City in April 1995. Originally conceived of in the mid-1950s, the MK54 was tasked with two primary missions. First, it was to be used as a so-called “anti-personnel weapon” against advancing Soviet troops in the event of an invasion of West Germany. In this case, the W54 was mated with a recoilless rifle mounted on a tripod resulting in the so-called “Davy Crocket” “atomic bazooka.” Capable of being broken down into four “loads” the Davy Crocket could be carried into battle by teams of three to four men. Once assembled, it could deliver, with a single round, “the explosive firepower [of] an entire conventionally-armed [US] artillery division.” In the early 1960s, approximately 400 W-54 Davy Crockets were produced. However, by 1971, all of them had been retired from service.

The second use of the MK54 was in used so-called “Special Atomic Demolition Munitions” (SADMs). In this case, unlike its anti-personnel Davy Crocket mission, the W54 was ordnance tasked with, among other things, the destruction of hardened targets, large military installations, tunnels, communication and command centers, and even dams. Between August 1964 and June 1966, approximately 300 SADMs were assembled. However, along with all other low-yield Atomic Demolition Munitions (ADMs), all SADMs were retired from the US' nuclear stockpile by 1990. (The W54 SADM was an implosion device weighing 42 pounds. It was “16 inches in diameter in the middle and stood 24 inches high.” Surrounding a sphere of approximately 19 pounds of U-235 was a “20 pound sphere” of TNT. Thirty-six electronic detonators initiated the nuclear implosion. While the weapon could be carried by one man, it required two to detonate it.)

As early as the late 1940s, the US also developed low-yield earth penetrating nuclear weapons (e.g., EPWs prior to the B61-11), the United States fielded two nuclear EPWs and made substantial progress on a third. As early as 1946, Los Alamos was studying the feasibility of a nuclear weapon that “pierced armored ship decks, buried underground bunkers, and heavily reinforced submarine pens.” By 1949, Los Alamos had begun engineering what would become the MK8, a gun-type device based largely on the “Little Boy” used in the Second World War. Scientists and military planners gave careful consideration to the weapons ability to destroy “deeply-buried command and control bunkers.” In 1951, the MK8 was tested in Nevada at a depth of 34 feet. The blast—the US' first underground nuclear test—was at a yield of 1.2 kilotons. Testing revealed that the device could penetrate 30 to 40 feet in sand, 45 to 60 feet in loam, and 85 to 100 feet in plastic clay. Scientists also concluded that, “if a hypothetical earth-penetrating bomb with a yield around 25 KT were detonated at a depth of 50 feet in the middle of an enemy airfield runway, it would produce a crater 700 feet in diameter and 140 feet deep, and displace approximately 900,000 cubic yards of earth. To fill this hole would require a month's work under a steady bombardment of lethal radiation.” Consequently, the US settled on a yield of 25 kilotons and began production of the MK8 in 1953. Approximately 40 MK8s were manufactured before the design was fully retired in 1957. Tasked with creating an EPW that could withstand higher impact velocities than the MK8, weaponeers began development of the MK11 in 1951. Once completed, it was reported to have the capability to pierce up to 22 feet of reinforced concrete, 90 feet of hard-packed sand, 120 feet of clay, and five inches of armor plate. Production of this improved EPW began in 1956; eventually 40 MK11s were produced, replacing the MK8s one-for-one. However, with an increasing emphasis on high-yield weapons, and portable atomic munitions (as described above) the MK11 was fully retired by 1960. Chuck Hansen, *The Swords of Armageddon: US Nuclear Weapons Development since 1945*, Volume VI (1996); Col. T. C. Mataxis and Lt. Col. S. L. Goldberg, *Nuclear Tactics, Weapons, And Firepower In The Pentomic Division, Battle Group, and Company*, US Army, (Harrisburg, Pennsylvania: The Military Service Publishing Company, 1958); Roger L. Albertson, “Backpack Nukes for ‘Nam,’” *Soldier of Fortune Magazine*, No. 20 (May 1995); “United States Nuclear Test: July 1945 through September 1992,” US Department of Energy Nevada Operations Office, (December 2000); “An NHP Interview with Theodore Taylor,” conducted at The University of Maryland, College Park,

US Nuclear Command and Control during the Second World War

Nuclear command and control actualized during a nuclear war has only occurred on one occasion: the atomic bombing of Japan in August 1945. Several variables make this event noteworthy from a command and control perspective:

- Employment decision made largely by consensus
The decision to employ two atomic weapons against Japan was made by President Truman (who held ultimate authority over the bombs) in consultation with the Interim Committee.¹³⁰ Created in May 1945, the Interim Committee was charged with making nuclear weapon policy and employment recommendations. The eight-man committee was a mix of civilian, military, and governmental officials.¹³¹ The committee never seriously considered not using the weapon against Japan; its deliberation centered on how to use the bomb and not “whether to use it.”¹³² In early June 1945 the committee made its unanimous recommendation for immediate use to President Truman.¹³³ Formal approval for employment of the new weapons was made by the president on July 24. Having delegated target selection to the Target Committee¹³⁴, Truman’s only caveat to use was that it commence after August 2 (the end of the Potsdam conference).
- Widespread perceptions that atomic weapons were militarily necessary
US leaders widely believed that in the absence of a “shock” weapon that forced capitulation, an invasion of the Japanese home islands was necessary in order to conclude the war.¹³⁵ US

MD, 12 April 1989, Nuclear History Program Oral History Transcript #1, pp. 12-13; and Robert Norris, “The B61 Family of Bombs,” *Bulletin of the Atomic Scientists*, (January/February 2003), pp. 74-76.

¹³⁰ It is widely accepted that the Interim Committee had more to do with decision to drop the atomic bombs than any other group. See, for example, Wainstock, *The Decision to Drop the Atomic Bomb*, p. 37.

¹³¹ The formal committee consisted of Secretary of War Henry L. Stimson (chairman); George L. Harrison (president of New York Life Insurance Company acting as Stimson’s special assistant); other governmental/military officials were Under Secretary of the Navy Ralph A. Bard, Assistant Secretary of State William L. Clayton (President Truman’s personal representative), and future Secretary of State, James F. Byrnes. Civilians/scientists consisted of Vannevar Bush (head of the Office of Scientific Research and Development—OSDR and President of the Carnegie Institute); James B. Conant (President of Harvard University, Bush’s close colleague and Chairman of the National Defense Research Committee); and Karl T. Compton (President of the Massachusetts Institute of Technology and head of the OSD’s S-1 Section which oversaw the Manhattan Project. Five additional advisors were also included. Four scientists (the Scientific Panel)—Robert Oppenheimer, Enrico Fermi, Karl Compton, and Arthur E.O. Lawrence—and General George C. Marshall represented the military. For accounts of the unprecedented role of civilians in determining the US’ nuclear policy (including targeting and employment authorization) during the second world war see James Hershberg, *James B. Conant: Harvard to Hiroshima and the Making of the Nuclear Age* (New York, NY: Alfred A. Knopf, 1993) esp. pp. 198-258; and G. Pascal Zachary, *Endless Frontier: Vannevar Bush, Engineer and the American Century* (New York, NY: The Free Press, 1997), esp. pp. 189-218.

¹³² Dennis D. Wainstock, *The Decision to Drop the Atomic Bomb* (Westport Connecticut: Praeger, 1996), p. 38. See also, Rhodes, *Making of the Atomic Bomb*, pp. 650-651.

¹³³ Considerable high-level opposition to the bomb’s use on populated targets did exist. Opposition included several of the Manhattan Project’s top scientists and General Eisenhower.

¹³⁴ The Target Committee consisted of various military and scientific personnel that included Robert Oppenheimer, Johnny von Neumann and Hans Bethe. Selection criteria included an impact that “most adversely affect the will of the Japanese people to continue the war,” a target that was “military in nature,” and, in order to “assess accurately the effects of the bomb,” targets not “previously damaged by air raids.” General Leslie Groves, as quoted in Rhodes, *Making of the Atomic Bomb*, p. 627. See also, Target Committee, Los Alamos, May 10-11, 1945. US National Archives, Record Group p. 77, Records of the Office of the Chief of Engineers, Manhattan Engineer District, TS Manhattan Project File ‘42-’46, folder 5D Selection of Targets, 2 Notes on Target Committee Meetings. Available at: <http://www.dannen.com/decision/targets.html>.

¹³⁵ The literature is vast vis-à-vis Japan’s willingness to surrender conditionally. While it is generally accepted that, in the words of Admiral Toyoda, “Russian participation in the war against Japan [initiated by a Soviet declaration of war on August 8, 1945] rather than the atomic bombs did more to hasten the surrender,” what is relevant in the context of this study is the *perception* of Japanese intransigence by US leaders. Admiral Toyoda as quoted in Wainstock, *The Decision to Drop the Atomic Bomb*, p. 90.

conventional war plans called for two massive campaigns against the Japan homeland: Operation Olympic—the invasion of southern Kyushu scheduled for November 1, 1945—was projected to encounter 390,000 Japanese troops.¹³⁶ Operation Coronet—the invasion of Honshu (e.g., the Tokyo plain) scheduled to take place on or about March 1 1946—was believed to be against a force of 1.5-2 million Japanese troops.¹³⁷ Operation Olympic alone was expected to result in 268,000 US casualties.¹³⁸

- Political pressure

At the Yalta conference it was agreed that the Soviet Union would enter the war against Japan ninety days after the defeat of Germany (i.e., after August 6, 1945).¹³⁹ (Hiroshima was struck on August 6, Nagasaki on August 9, and the Soviets declared war on Japan on August 8.)

- Incomplete understanding of atomic weapons

Apart from an understanding that its yield would be unprecedented, policy makers were largely unaware of the bomb's unique characteristics. For example, Truman's early impression of the bomb (prior to the July 1945 Trinity test) was that it would yield the equivalent of about 500 tons of TNT.¹⁴⁰ Despite having had military experience in the First World War, it is not clear that Truman ultimately grasped the destructive capability of a twenty-kiloton weapon. Moreover, despite warnings as early as the Frisch-Peierls Memorandum of March 1940, the bomb's effects were gauged without including the effects of radioactive fallout or fire.¹⁴¹

- Small atomic arsenal

With the Trinity test and the bombing of Hiroshima and Nagasaki, the United States had exhausted its inventory of deployable nuclear weapons. In short, employment goals (i.e., the capitulation of Japan of the shortest amount of time—before Soviet entry into the war or the shortest amount of time thereafter) would have to be accomplished with two weapons.¹⁴²

- Decentralized targeting authority

For both nuclear attacks on Japan, ultimate employment decisions were made by the respective nuclear-armed bomber commanders. The first attack allowed for a real-time targeting decision to be made, depending on the weather, which would allow for Hiroshima (the primary target), Kokura, Nagasaki or Niigata to be struck. The second attack similarly called for an in-flight determination of the target: either Kokura or Nagasaki.

US Nuclear Command and Control after the Second World War

¹³⁶ Steven T. Ross, *American War Plans: 1941-1945* (London: Frank Cass, 1997), pp. 157-60

¹³⁷ Ross, *American War Plans: 1941-1945*, pp. 158-60.

¹³⁸ Ibid.

¹³⁹ In response to the successful Trinity test, Truman confided in his diary, "Believe Japs will fold up before Russia comes in....I am sure they will when Manhattan appears over their homeland." As quoted in Rhodes, *Making of the Atomic Bomb*, p. 688.

¹⁴⁰ Wainstock, *The Decision to Drop the Atomic Bomb*, p. 37.

¹⁴¹ Otto Frisch and Rudolf Peierls' memorandum—"The Feasibility of a 'Superbomb'; based on a Nuclear Chain Reaction in Uranium"—precipitated British inception of the Maude Committee, the conclusions of which led to the first substantive efforts by the US to initiate the construction of an atomic bomb (contrary to popular narratives, the famous Einstein/Sizard letter of August 2, 1939 resulted in little immediate tangible action by the US government). See, Margaret Gowing, *Britain and Atomic Energy: 1939-1945* (London: Macmillan and Company, 1964), pp. 45-89 and Ferenc Morton Szasz, *British Scientists and the Manhattan Project: the Los Alamos Years* (New York: St Martin's Press, 1992), pp. 5-9.

¹⁴² Later in 1945, the US had two more deployable nuclear weapons; by mid-1946, this number had grown to nine; by mid-1947, there were 13 weapons available; and by mid-1948, fifty nuclear weapons were reportedly stockpiled. See David Alan Rosenberg, "US Nuclear Stockpile, 1945 to 1950," *Bulletin of the Atomic Scientists*, May 1982, pp. 25-30.

Up until at least 1949, the continental United States did not face an immediate, large scale, or nuclearized Soviet threat.¹⁴³ President Truman's highly assertive control of atomic forces during this period reflected this lack of time-urgency. Nevertheless, as Feaver has pointed out, much of the catalyst to an assertive system was an "inevitable backlash against the military [following the Second World War]...prompting a desire for a return to some form of normalcy, including civilian preeminence in all aspects of public policy."¹⁴⁴ This recoil against the military only gained momentum in a series of highly publicized incidents that displayed the putative belief that the military, according to President Truman, consisted of "bunglers, incompetents, warmongers, and worse."¹⁴⁵ The 1946 creation of the Atomic Energy Commission (AEC) mirrored these attitudes and concerns: its initial role included sole custody of atomic weapons. Military planning during this time took into account the logistical delays that would accompany civilian control of atomic weapons. For example, Operation HALFMOON, which came into effect on May 19, 1948, involved a delay of fifteen days between the commencement of a surprise Soviet attack on Western Europe and the beginning of retaliatory US strategic atomic bombings against twenty major Soviet urban areas.¹⁴⁶

It is critical to appreciate that this case is an example *par excellence* of assertive civilian command and control. It contains the critical element of military exclusion from positions of authority over nuclear policy formation.¹⁴⁷ Moreover, until April 1951¹⁴⁸ the AEC maintained complete physical control over *all* nuclear weapons as well.¹⁴⁹

¹⁴³ The first Soviet nuclear test—"Joe 1"—was in August 1949. Nuclear-armed Soviet bombers, flying one-way missions, could have theoretically struck the United States shortly after this point. Subsequent to Joe I, the CIA estimated that by mid-1950 "the Soviets would possess 10 to 12 bombs...25 to 45 by mid-1951, 45-90 by mid-1952, and 70 to 135 by mid-1953. Jeffrey Richelson, *Spying on the Bomb: American Nuclear Intelligence from Nazi Germany to Iran and North Korea* (New York: W. W. Norton, 2006), p. 93. The first Soviet test of true hydrogen weapon occurred in November 1955 (an airdropped device, it was estimated by both the Soviets and the Americans to have had a yield of 1.6 megatons). The first Soviet boosted fission weapon tests occurred more than two years earlier—in August 1953. Despite claims by the Soviets that the latter test—"Joe 4"—was thermonuclear, US officials quickly and accurately concluded that, although the yields approached 400 kilotons, it was fission in nature. David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy 1939-1956*, (New Haven CT: Yale University Press, 1994), pp. 300-319, and Richelson, *Spying on the Bomb*, pp. 103-104.

¹⁴⁵ Feaver, *Guarding the Guardians*, p. 101. Two particular incidents, shortly after the conclusion of WW II, drove the US public and its civilian leaders against military control of all nuclear matters. The first had to do with the behavior of General Leslie Groves as head of the Army's Manhattan Engineering District (MED). Specifically, when the Senate established the Select Committee on Atomic Energy to examine its nascent nuclear policy, General Groves refused to supply the legislators with large amounts of material they had requested from him and his staff. General Groves contended that the material was too sensitive. The second incident was the Army's confirmation in November of 1945 that, under General MacArthur's orders, discovered Japanese cyclotrons were thrown into the Pacific. Although this atomic research equipment was intended for peaceful Japanese research, the US public saw the actions of its army as proof that it "would try to maintain full control of *all* atomic research whatever its purpose." See *Ibid*, pp. 87-94.

¹⁴⁶ The civilian controlled Atomic Energy Commission (AEC) took control of all US nuclear weapons on January 1, 1947. Prior to that time, control of the atomic arsenal rested with the Manhattan Engineering District (MED). Because the MED was run by military officers and since they had *custody* of these new weapons, "[t]he initial pattern of civilian control, then, was delegative." *Ibid*, 89, emphasis added. During this time of an American nuclear monopoly less than ten weapons were available for use. So secretive was information about this surprisingly small arsenal that neither President Truman, Secretary of State James Byrnes, Secretary of the Navy James Forrestal nor the Joint Chiefs of Staff (JCS) were formally briefed about it until April of 1947. See, Rosenberg, "US nuclear stockpile, 1945 to 1950, pp. 25- 30.

¹⁴⁷ For details of Operation HALFMOON, see Stephen T. Ross, *American War Plans, 1945-1950* (New York: Garland, 1988), pp. 89-92. Confirming Rosenberg's assertion that the US had 50 nuclear components and 53 mechanical assemblies during this time, Ross claims, "the atomic stockpile [in 1948] was in the range of fifty weapons." *Ibid*, p. 92. It is interesting to note that HALFMOON contained many elements of previous plans like BROILER and BUSHWACKER. In these operations "[t]he atomic campaign would be supplemented by conventional bombing operations and *biological warfare* strikes." *Ibid*, p. 84, emphasis added. To what degree, if any, time-urgency perceptions changed due to the military's control of biological weapons, is an interesting area for further research.

¹⁴⁸ General LeMay was the commander of the Strategic Air Command (SAC) from 1948-1957. General Johnson was commanding general of the Fifteenth Air Force at Colorado Springs, Colorado in 1947, and from 1948-1952 was

Yet, as would be predicted by organization theory, the US military chafed at such an arrangement. Indeed, implicit arrangements were created almost immediately that would have allowed the military to supersede the AEC's control. Evidence for this can be found in an interview in 1984 with retired Generals Curtis LeMay, Jack Catton, and Leon Johnson, a dialogue that warrants considerable quoting:

- LeMay: I might add something about the atomic bombs at this time [1948-1949]: the military services didn't own a single one. These bombs were too horrible and too dangerous to entrust to the military. They were under lock and key of the Atomic Energy Commission. I didn't have them, and that worried me a little bit to start with. So, I finally sent somebody to see the guy who had the key. We were guarding them. [By this time the military had gained responsibility for protecting a portion of the growing atomic arsenal.¹⁵⁰] Our troops guarded them, but we didn't own them.
- Catton: They didn't trust us.
- LeMay: Civilian-controlled completely. I remember sending somebody out . . . to have a talk with the guy with the key. I felt that under certain conditions—say we woke up some morning and there wasn't any Washington or something—I was going to take the bombs. I got no static from this man. I never had to do it or anything, but we had an understanding . . .
- Johnson: You couldn't release them, however.
- LeMay: I would have, under certain conditions, yes.
- Johnson: You mean after we had already been attacked?
- LeMay: If I were on my own and half the country was destroyed and I could get no orders and so forth. I wasn't going to sit there fat, dumb, and happy to do nothing.
- Catton: This business, of course, as you can understand, had progressed from nearly no capability to deliver atomic weapons to the absolute necessity of being able to launch within very brief periods of time, within the warning time available. Eventually, of course we got to where we are today...¹⁵¹

The Cold War: Perceptions of High Time Urgency

By the late 1950s, LeMay's successor as the US commander-in-chief, Strategic Air Command (CINCSAC), General Tommy Powers, would no longer have "to take the bombs," as 15,000 of these weapons, over 82 percent of the total US nuclear stockpile, were under the military's direct control.¹⁵² In addition to arsenal expansion, two other developments led to this period of delegated nuclear authority. First, this was a period when the Soviets were enlarging their nascent nuclear arsenal, developing ballistic missiles that could reach Western Europe (and, eventually, the US) and engaging in military activities widely perceived as preludes to a general war with the West. Second, this increase in time-urgency came at a time when civilian leadership, in the form of President Eisenhower, was predisposed to have trust in the efficacy and professionalism of the military.

commander of the Third Air Division (known now as the Third Air Force), which provided support, maintenance, and facilities for the Strategic Air Command in its European missions.

¹⁴⁸ Non-nuclear weapon components had been transferred as early as 1948. See also, Feaver, *Guarding the Guardians*, chap. 6, esp. pp. 137-138.

¹⁴⁹ The 1946 Atomic Energy Act, effective on January 1, 1947, required that the military transfer all nuclear weapons to the AEC.

¹⁵⁰ See Feaver, *Guarding the Guardians*, *passim*.

¹⁵¹ "US Strategic Air Power, 1948-1962: Excerpts from an Interview with Generals Curtis E. Lemay, Leon W. Johnson, David A. Burchinal, and Jack J. Catton," ed. Richard H. Kohn and Joseph P. Harahan, *International Security* 12 (Spring 1988), pp. 83-84. Emphasis added.

¹⁵² Kurt Gottfried and Bruce G. Blair eds, *Crisis Stability and Nuclear War* (New York, Oxford: Oxford University Press, 1988), 48. For exact numbers, see Peter J. Roman, "Ike's Hair-Trigger: US Nuclear Predelegation, 1953-60" *Security Studies* 7, Vol., No. 4 (Summer 1998), pp. 121-122.

As nuclear strategy developed, there emerged during Eisenhower's first term a near hysterical concern that the Soviets could defeat the US and its allies by a surprise attack against their air forces. Fred Kaplan has described this "concern about vulnerability [as growing] into an infatuation, then an obsession, and finally a fetish of sorts."¹⁵³ In fact, President Eisenhower received a report in 1957 written by the Gaither Committee that concluded that not only were the Soviets on the verge of achieving the technological sophistication to launch a successful first-strike, but that once this was achieved "they might well go ahead and launch."¹⁵⁴

To American leaders, the answer was clear: delegate enough authority to assure that any hostile Soviet actions against the United States or Western Europe would be met with "massive retaliation" while enabling troops in contentious regions to respond to incursions with tactical nuclear weapons.¹⁵⁵ Predelegation is evidenced in a 1957 top secret document originating from the President, "Instruction for the Expenditure of Nuclear Weapons," which established that in the event of a surprise Soviet attack on the US (writ large), "when the urgency of time and circumstances does not permit a specific decision by the President, or any other person empowered to act in his stead, the Armed Forces of the United States are authorized to expend...all types of weapons and devices which release atomic energy."¹⁵⁶ Similarly, a top secret memorandum from June 1958 details President Eisenhower's desire to "see the State Department make such arrangements [legal US employment of nuclear weapons in Europe] to remove existing impediments to use of these [nuclear] weapons in self-defense."¹⁵⁷

Due to the
interrelated challenges of
vulnerability
and
an asymmetric escalation posture,
central—
Assertive—control
of nuclear weapons
is subservient to the requirements
of a
peripheral launch capability and
Pre-delegation.

In short, the 1950s saw the emergence of profound concerns revolving around time urgency and a broad reversal of the distrustful attitudes that many American citizens and their civilian leaders had toward military custody of nuclear weapons in the late 1940s. President Eisenhower symbolized this change. His recent military experiences predisposed him towards predelegation. He was a leader who strongly believed that professionals should "cultivate their own garden."¹⁵⁸ Thus, military planners had a simple yet absolute mission: the ability to achieve a predetermined

¹⁵³ Kaplan, *The Wizards of Armageddon*, p. 110.

¹⁵⁴ Ibid, p. 142.

¹⁵⁵ See, Blair, *The Logic of Accidental Nuclear War*, pp. 46-58. It should be noted that this time also saw new weapon designs, for example the "sealed-pit," which allowed for much easier handling and deployment options than had been the case in the 1940s.

¹⁵⁶ "Instructions for the Expenditure of Nuclear Weapons in Accordance with the Presidential Authorization Dated May 22, 1957," revised between 28 January 1959 and 12 May 1960, Top Secret, Excised Copy, pp. 4, 5. Declassified and released through FOIA. Covered as well by the directive were certain sea-lanes. Delegation of authority was granted to the following military entities: "The Commander in Chief, US – Europe; The Commander in Chief, Alaska, The Commander in Chief, Caribbean, The Commander in Chief, Atlantic; The Commander in Chief, Continental Air Defense; The Commander in Chief Pacific; The Commander in Chief, Strategic Air Command....commanders of numbered field armies, fleets, and air forces, and commanders of Joint Task forces and other commands equivalent in stature to the numbered forces may from time to time be designated as Authorizing Commanders by recommendation of a Specified of Unified Commander to the Joint Chiefs of Staff or by the Joint Chiefs of Staff, with the approval of the Secretary of Defense and the President in each case." Ibid, p. 20.

¹⁵⁷ General Andrew J. Goodpaster, "Memorandum of Conference with the President," June 27, 1958 - 11:05 AM," 30 June 1958, Top Secret. Declassified and released through FOIA.

¹⁵⁸ Feaver, *Guarding the Guardians*, p. 152.

level of “damage expectancy.”¹⁵⁹ All other concerns were ignored. The military organizations charged with delivering nuclear weapons were, in the words of Bruce Blair, “able to cope with the pervasive confusion of complex crisis situations simply by ignoring information that was not pertinent to its critical mission.”¹⁶⁰

2. Pakistan

Although believed to have acquired a nuclear weapons capability as early as the late 1980s, Pakistan did not successfully test a yield bearing nuclear device until May of 1998 (only months before it experienced its fifth coup).¹⁶¹ Categorically, given its conventional military inferiority and geographic vulnerability (e.g., lack of strategic depth) with *bête noire* India, Pakistan lends itself to a delegative command and control system.¹⁶² In relation to all other nuclear powers (with the possible exception of North Korea), Pakistan’s civil-military relations resist traditional classifications. Although initiated under a civilian government—in part, some argue, to “reduce the role of the military in domestic politics and [increase] that of civilian elites, including scientists”—Pakistan’s nuclear program and weapons are firmly under the control of the military.¹⁶³ Indeed, at the time of her civilian leadership, Benazir Bhutto famously complained that she “wasn’t even allowed to visit a nuclear facility.”¹⁶⁴ Therefore, the use of the terms “delegative” and “assertive,” in the case of Pakistan, can be misleading. In such circumstances—i.e., nuclear command and control in states where there is no *de facto* significant interplay between civil and military officials vis-à-vis guardianship and authority of nuclear weapons—Jordan Seng has posited the use of terms “central control” and “peripheral launch capability.”¹⁶⁵

Pakistan likely utilizes a command and control system that facilitates a peripheral launch capability. Yet, while excluding civilian input, the control system also possesses significant central control qualities. As noted earlier, a peripheral launch capability is likely because of Pakistan’s lack of strategic depth; proximity

¹⁵⁹ Blair, *The Logic of Accidental Nuclear War*, pp. 38-58. That the damage expectancy (DE) was overwhelmingly seen in *quantitative* terms is demonstrated in the following equation that the military used to determine it: “DE = PK x PTP x PLS x PRE, where PK is the probability of destroying—or killing—the target; PTP is the probability of penetrating air defenses; PLS is prelaunch survivability (probability that systems survive enemy preemptive actions); and PRE is the probability that systems function reliably.” For a complete analysis of this and other formulas that calculate damage expectancy and graphically describe the physical consequences, see Theodore A. Postol, “Targeting” in Carter, Steinbruner, and Zraket eds., *Managing Nuclear Operations*, pp. 373-406.

¹⁶⁰ Blair, *The Logic of Accidental Nuclear War*, p. 38.

¹⁶¹ Zafar Iqbal Cheema, “Pakistan’s Nuclear Use Doctrine and Command and Control,” in Peter R. Lavoy, Scott D. Sagan, and James J. Wirtz, eds., *Planning the Unthinkable* (Ithaca and London: Cornell University Press, 2000), p. 159. Interestingly, Cheema notes that of Pakistan’s six tests, five responded to the five Indian tests that occurred earlier that month, while the sixth was “to match India’s 1974 explosion.” Ibid. However, there have been assertions that this sixth test was done with the cooperation and involvement of North Korea, to advance their nuclear program. See David E. Sanger and William J. Broad, “Pakistan May Have Aided N Korea A-Test,” *The New York Times*, February 27, 2004. Unconfirmed reports exist of Pakistan deploying nuclear weapons as early as the 1986/87 Brass Tacks Crisis and again during the 1990 Indo-Pakistan crisis. See, for example, Hoyt, “Pakistan’s Nuclear Deterrence and the Dangers of Strategic Myopia,” pp. 961, 971.

¹⁶² See, Jones, *Pakistan*, pp. 219-225.

¹⁶³ Hoyt, “Pakistan’s Nuclear Deterrence and the Dangers of Strategic Myopia,” p. 960. Even before the 1998 test and the 2000 establishment of the National Command Authority (NCA) it was generally assumed that the military had authority over employment decisions along with “responsible for physical control of Pakistan’s nuclear weapons program.” See, Clayton P. Bowen and Daniel Wolvén, “Command and Control Challenges In South Asia,” *The Nonproliferation Review*, (Spring-Summer 1999), p. 27.

¹⁶⁴ Owen Bennet Jones, *Pakistan: Eye of the Storm* (New Haven, CT: Yale Press, 2002), p. 221. Nawaz Sharif reportedly also complained of being left on the nuclear sideline.

¹⁶⁵ Jordan Seng, “Less is More: Command and Control Advantages of Minor Nuclear States,” *Security Studies*, Vol. 6, No. 4, (Summer 1997), pp. 50-92, esp. p. 56, footnote 14. Seng notes that “In Feaver’s description of US command-and-control history, central control is equated with civilian assertiveness, and peripheral launch capability is equated with *de facto* military control of nuclear weapons. Although this is probably a good characterization of the United States, the tension between peripheral launch capability and central control will obtain regardless of whether it has a civilian vs. military aspect to it.” Ibid.

to India is so immediate that nuclear decapitation is a pervasive threat. During the Cold War, a Soviet bolt-out-of-the-blue attack on the United States featured attack warnings of around 30 minutes or less.¹⁶⁶ In the case of South Asia, a shared border between India and Pakistan leads to attack warnings of around four minutes, even if one assumes the existence of “a sophisticated early warning system.”¹⁶⁷

Adding to the odds of predelegative system is Pakistan’s conventional military inferiority to India. Consequently, some experts maintain that Islamabad has adopted an asymmetric escalation posture (Pakistan has never formally declared a No First Use policy¹⁶⁸).¹⁶⁹ As noted earlier, such a posture necessitates predelegation. In short, due to the interrelated challenges of vulnerability and an asymmetric escalation posture, central control of nuclear weapons is subservient to the requirements of a peripheral launch capability.

*Employment Control Committee (ECC) Employment Control Committee (ECC)*¹⁷⁰

However, a degree of central control is necessary for two broad reasons. First, Pakistan’s internal unrest requires close arsenal guardianship and stringent measures to prevent seizure of nuclear weapon components and accidental or unauthorized detonations.¹⁷¹ Pakistan must also placate US nuclear command and control concerns in order to maintain, *inter alia*, generous aid packages. Perhaps most significantly, Pakistan must demonstrate to India that its arsenal is stable in both peacetime and in crisis in order to avoid possible preemptive strategic nuclear counterforce strikes or retaliatory strikes initiated by India in response to unauthorized or accidental Pakistani nuclear events.

Central control is exercised in two ways. First, conventional wisdom holds that Pakistan maintains its nuclear arsenal in a disassembled state: a trifurcated manner where the weapon’s fissile core, non-nuclear

¹⁶⁶ By the early 1970s, Soviet ballistic missile submarines employing depressed trajectories could theoretically strike the US in less than 25 minutes. See Blair, *Strategic Command and Control*, pp. 147-148, esp. figure 5-2, “Flight Time and Ranges for Three Submarine Launched Ballistic Missile Trajectories.”

¹⁶⁷ Bowen and Wolvén, “Command and Control Challenges In South Asia” p. 35, footnote 28. Others place warning times at three minutes. See, for example, Jones, *Pakistan*, p. 222. Pakistan is not generally believed to possess an effective early warning system to detect intruding aircraft. During the August 1998 cruise missile attack against Afghanistan, the US made plans to address (ultimately unrealized) fears that Pakistan would detect the missiles and erroneously conclude it was an Indian attack. US General Joseph Ralston, vice chairman of the Joint Chiefs of Staff, met with Pakistani army chief General Jehangir Karamt during the exact time of the strike [ostensibly to discuss routine matters] in the event Sharif got word of an airstrike. Pakistan did not detect the missiles. Steve Coll, *Ghost Wars* (New York, New York: Penguin, 2004), p. 411.

¹⁶⁸ See, for example, Ali Ahmed, “Furthering ‘No First Use’ in India-Pakistan Context,” *Journal of Defence Studies*, Vol. 3, No. 3 (July 2009), pp. 117-124. Available at: http://www.idsa.in/system/files/jds_3_3_aahmed.pdf

¹⁶⁹ See Narang, “Posturing for Peace?” In contrast, Hoyt contends that Pakistan utilizes a catalytic posture, evidenced by their belief “that the international community would immediately intervene to limit escalation, because of the formal nuclearization of the region after the May 1998 nuclear tests. See, Hoyt, “Pakistan’s Nuclear Deterrence and the Dangers of Strategic Myopia,” p. 973, emphasis added. However, the Kargil crisis of 1999 and, especially, the 2001/2002 standoff with India, failed to mobilize the international community (i.e., the United States and China in the former and the United States in the latter) in the manner Pakistan sought. Thus, Pakistan’s posture is now likely to be largely one of asymmetric escalation. See Charles P. Blair, “Radiological and Nuclear Behavioral Profile: Pakistani Neo-Taliban,” report prepared for the Science and Technology Directorate, Department of Homeland Security, grant number N00140510629 (College Park, MD: National Consortium for the Study of Terrorism and Responses to Terrorism, 2010), pp. 77-78. Narang maintains that Pakistan “shifted from a catalytic to an asymmetric escalation posture in 1998,” Narang, “Posturing for Peace?” p. 5.

¹⁷⁰ Mahmud Ali Durrani, “Pakistan’s Strategic Thinking and the Role of Nuclear Weapons,” *Cooperative Monitoring Center Occasional Paper*, No. 37 (July 2004), Sandia National Laboratories. Available at: <http://www.cmc.sandia.gov/cmc-papers/sand2004-3375p.pdf>.

¹⁷¹ Extant threat to Pakistan’s nuclear complex are discussed at length in Blair “Radiological and Nuclear Behavioral Profile: Pakistani Neo-Taliban,” pp. 67-179.

components (e.g., firing circuitry and explosives), and delivery apparatus are all separated.¹⁷² Pakistani officials maintain that even during times of crisis, such as the 2001/2002 standoff with India, for example, these components are not mated.¹⁷³ When handling components or an intact weapon, Pakistan claims to abide by “two-man” or “three-man” rules “and very tight selection [processes] for vetting personnel involved with nuclear weapons—mirroring in many ways, some believe, the US Personnel Reliability Program.”¹⁷⁴

The second way in which Pakistan may exercise elements of central control is through its three-tiered system for nuclear guardianship, collectively found under the rubric of the Strategic Command Organization. First, Islamabad’s nuclear weapons employment policy is granted to its National Command Authority (NCA).¹⁷⁵ “The final authority to launch a nuclear strike,” at least nominally, “requires consensus within the NCA.”¹⁷⁶ The final nuclear employment vote comes from the NCA’s chairperson—“the head of the Government.”¹⁷⁷ Such a designation, Timothy Hoyt has noted, allows for “interpretation, depending on whether Pakistan is in a period of presidential, parliamentary or military rule.”¹⁷⁸ Second, the Strategic Plans Division (SPD), possesses functions that include the formulation of Pakistan’s nuclear strategy, doctrine, and policy; establishing and overseeing the nuclear chain of command; and “formulating operational plans at the service level for the movement, deployment, and use of nuclear weapons.”¹⁷⁹ Finally, Pakistan’s Strategic Forces Commands—relevant sections of the Army, Air Force, and Navy—are consulted and represented in the SPD.¹⁸⁰ In sum, the NCA—by consensus—theoretically has the sole authority to order the use of nuclear weapons; the SPD actualizes those orders and employs the weapons.

3. South Africa

During the 1970s, South Africa initiated ambitious, clandestine and, ultimately, successful programs to develop chemical, biological and nuclear weapons. These efforts, which included land vehicles to launch non-conventional warheads, were enhanced by an industrious space-launch-vehicles program. By the late

¹⁷² See Charles P. Blair, “Jihadists and Nuclear Weapons,” in Gary Ackerman and Jeremy Tamsett, eds., *Jihadists and Weapons of Mass Destruction: A Growing Threat* (New York: Taylor and Francis, 2009), p. 208.

¹⁷³ Blair, “Jihadists and Nuclear Weapons,” p. 208.

¹⁷⁴ Ibid.

¹⁷⁵ According to some sources, Pakistan’s NCA has existed since 1975; however, it was not until 2000 that its existence was formally acknowledged. Jones, *Pakistan*, p. 221. The NCA is comprised of the Employment Control Committee (ECC) and the Development Control Committee (DCC). Being a mixture of military and civilian officials, the ECC’s functions include command and control systems that govern the use of nuclear weapons. The DCC “exercises technical, financial and administrative control over all strategic organizations, including national laboratories and research and development organizations associated with the development and modernization of nuclear weapons.” Paul Kerr and Mary Beth Nikitin, “Pakistan’s Nuclear Weapons: Proliferation and Security Issues,” CRS Report for Congress, Congressional Research Service, January 28, 2008, p. 9. See also, *Nuclear Black Markets: Pakistan*, A.Q. Khan and the Rise of Proliferation Networks, (London: The International Institute for Strategic Studies, 2007, pp. 110-111.

¹⁷⁶ Kerr and Nikitin, “Pakistan’s Nuclear Weapons,” p. 9.

¹⁷⁷ “National Command Authority Established,” Associated Press of Pakistan, February 3, 2000. With relation to the establishment of the NCA, open source accounts report that the “National Security Council on Feb. 2 approved the establishment of National Command Authority....The meeting was chaired by the Chief Executive General Pervez Musharraf. NCA will be responsible for policy formulation, and will exercise employment and development control over all strategic nuclear forces and strategic organizations.” Federation of American Scientists, National Command Authority. Available at: <http://www.fas.org/nuke/guide/pakistan/agency/nca.htm>. Prior to 2000, several press reports stated that “the chairman of the joint chiefs of staff was to be the strategic commander” of Pakistan’s nuclear forces; however, the final decision to employ nuclear weapons “would be the prime minister’s, acting on the basis of consultations with the National Command Authority [NCA].” Jones, *Pakistan*, p. 220. Regardless of this public posture, made before the October 1999 military coup, it seems highly unlikely that the prime minister could convince the Pakistani military to employ nuclear weapons without the prior authorization of the Chief of Army Staff (Pakistan’s highest military post; a position held by Pervez Musharaff from 1998 to 2007).

¹⁷⁸ Hoyt, “Pakistan’s Nuclear Deterrence and the Dangers of Strategic Myopia,” p. 965.

¹⁷⁹ Kerr and Nikitin, “Pakistan’s Nuclear Weapons,” p. 9. See also Jones, *Pakistan*, p. 222.

¹⁸⁰ Ibid.

1980s, six nuclear warheads had been fabricated, a variety of chemical and biological agents—under the auspices of “Project Coast”—had been produced, and an infrastructure for manufacturing 3,000-kilometer-range ballistic missiles devised for delivering nuclear weapons had been achieved.¹⁸¹ In short, an effective and sophisticated non-conventional weapons infrastructure had been created.¹⁸²

In contrast to a range of immediate military uses inherent to Project Coast, South Africa’s nuclear program is widely portrayed as “political” in potential application; indeed, South Africa seems to have adopted a catalytic posture *par excellence*. Never was its intention, some strongly contend, “for military use or integration into the country’s military forces.”¹⁸³ This political nuclear strategy had three phases.¹⁸⁴ Collectively they were considered as an “insurance policy” for “a worst case scenario of South African territory, including Namibia, being threatened by external invasion, supported by Warsaw pact countries.”¹⁸⁵ Dr. Waldo Stumpf, head of South Africa’s Atomic Energy Corporation (AEC), has described the official “deterrent strategy” (reportedly approved in April 1978) as threefold:¹⁸⁶

Phase 1: Strategic uncertainty in which the nuclear deterrent capability will not be acknowledged or denied.

Phase 2: Should South African territory be threatened, for example, by the Warsaw Pact countries through the surrogate Cuban forces in Angola, covert acknowledgment to certain international powers, e.g. the USA, would be contemplated.

Phase 3: Should this partial disclosure of South Africa’s capability not bring about international intervention to remove the threat [i.e., have a catalyzing impact on powerful third parties], public acknowledgment or demonstration by an underground test of South Africa’s capability would be considered.

¹⁸¹ Frank V. Pabian, “South Africa’s Nuclear Weapon Program: Lessons for US Nonproliferation Policy,” *The Nonproliferation Review*, Fall 1995, p. 18. While six warheads were ultimately built, South Africa had initial plans for an arsenal of seven fission gun-type devices. See Waldo Stumpf, “Birth and Death of the South African Nuclear Weapons Programme” Atomic Energy Corporation of South Africa Ltd. September 1995. Available at: <http://www.fas.org/nuke/guide/ras/nuke/stumpf.htm>.

¹⁸² The U.N. reported in 2002 that South Africa’s chemical warfare program did not produce or stockpile “chemical warfare agents on a large scale other than CS and CR [i.e. teargas].” The biological warfare program, the report also contends, did not produce or stockpile large quantities of biological agents. However, Project Coast did explore novel and bizarre agents and delivery methods. More importantly, Project Coast had little accountability and, while key details are still not publically available, it is clear that it involved an international ring of shadowy scientists, intelligence operatives and arms merchants. In contrast to the UN’s findings vis-à-vis the *quantity* of agents produced, some researchers, emphasizing Project Coast’s *qualitative* aspects, have emphasized that “South Africa’s chemical and biological warfare program ... [was] the ‘second most sophisticated program’ in terms of the range of biological agents possessed and the science involved; only the Soviets had a better program.” “Project Coast: Apartheid’s Chemical and Biological Programme,” United Nations Institute for Disarmament Research (UNIDIR), 2002. Helen E. Purkitt and Stephen F. Burgess, *South Africa’s Weapons of Mass Destruction* (Indianapolis: Indiana University Press, 2005), p. 104.

¹⁸³ Project Coast had immediate applications vis-a-vis crowd control and assassinations. See Purkitt and Burgess, *South Africa’s Weapons of Mass Destruction*, pp. 85-118. For quotation, see David Albright, “South Africa and the Affordable Bomb,” *The Bulletin of the Atomic Scientists*, July/August 1994, pp. 37-47. Available at: http://people.reed.edu/~ahm/Courses/Stan-PS-314-2009-Q1_PNP/Syllabus/EReadings/Albright1994South.pdf.

¹⁸⁴ These phases are in, among other sources, Pabian, “South Africa’s Nuclear Weapon Program,” p. 7; Marie Muller, “South Africa Crisscrosses the Nuclear Threshold,” in William Gutteridge ed., *South Africa’s Defence and Security into the 21st Century* (Brookfield, VT: Dartmouth Publishing Company, 1996), pp. 34-35; Sagan, “Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb,” in *New Global Dangers: Changing Dimensions of International Security* (International Security Reader, July 2004), p. 60; Bridled Ambition: Why Countries Constrain their Nuclear Capabilities (Washington, DC: The Woodrow Wilson Center Press, 1995), p. 16; Purkitt and Burgess, *South Africa’s Weapons of Mass Destruction*, pp.79-80; J.W. De Villiers, Roger Jardine and Mitchell Reiss, “Why South Africa Gave Up the Bomb,” *Foreign Affairs*, p. 72 (1993); and Stumpf, “Birth and Death of the South African Nuclear Weapons Programme.”

¹⁸⁵ As quoted in Pabian, “South Africa’s Nuclear Weapon Program,” p. 7.

¹⁸⁶ All three Phases quoted verbatim from Stumpf, “Birth and Death of the South African Nuclear Weapons Programme.” South Africa’s Atomic Energy Board (AEB) was established in 1949 and renamed the Atomic Energy Corporation [AEC] in 1982.

Despite South African insistence that “[n]o offensive tactical application was ever foreseen or intended,” some open-sources claim that there was a fourth phase: employment of nuclear weapons “for *war-fighting* in the event its catalyzing posture failed.”¹⁸⁷ Support for the existence of this added (non-political) phase is bolstered by the fact that South Africa actively researched more sophisticated implosion methods while simultaneously securing tritium from Israel. Together these developments would enhance the efficiency of the weapon, decrease its weight and enhance its deliverability.¹⁸⁸ Nuclear historian Richard Rhodes has described phase four in the following manner:

The whole truth is that its small cache of gun bombs was a picket guard in advance of a full-scale nuclear arsenal, with means of delivery that would have included everything from atomic artillery to ICBMs—the ICBMs to hold Soviet cities at risk, a ‘Sampson option,’ as Hersh calls it, that Israel had already implemented.¹⁸⁹

Authoritative open source accounts of South Africa’s nuclear command and control bolster the existence of a catalytic posture. Counterforce or decapitative strikes were highly unlikely because of the bomb’s clandestine nature. Additionally, even if its adversaries were aware of the small arsenal, “other African states could not have projected sufficient military power into the heart of South Africa to destroy the entire nuclear inventory.”¹⁹⁰ Consequently, South Africa could maintain its arsenal in a standby mode. For example, the subcritical halves of each weapon’s fissile core were reportedly stored separately (all weapons utilized highly enriched uranium in a gun-type assembly¹⁹¹).¹⁹² Mitchell Reiss states that South Africa employed “coded locking devices (better known as permissive action links of PALS).”¹⁹³ South Africans deeply involved with the program mention coded locks in relation to storage vaults. These same authors maintain that with regard to the deployment of nuclear weapons:

Nuclear warheads were to be mated for the first time (i.e. the two separate parts containing the sub-critical components) [sic] were bolted together without removing the physical separation between the sub-critical components on the flight-line. That means just before final integration with the missile (or glide bomb or underground test facility). Similar release procedures... were needed for mission preparation. At this point, with the full command chain authenticated and authorized, preparations for underground detonations on the test site, aircraft take-off or ‘prepare-for-missile-launch’, could take place.

The last authentication and authorization would take place in the aircraft (or in the cockpit of the launch vehicle or in the control room of the test facility) when the pilot and the weapons controller concurrently armed the weapons system. This arming action would allow the bomb’s safety and arming mechanism to, finally, remove the physical barrier between the sub-critical [HEU]

¹⁸⁷ Stumpf, “Birth and Death of the South African Nuclear Weapons Programme” and Richard Rhodes, *The Twilight of the Bombs* (New York: Alfred A. Knopf, 2010), p. 157. Emphasis added.

¹⁸⁸ David Albright, “Slow But Steady,” *Bulletin of the Atomic Scientists*, July-August 1993.

¹⁸⁹ Richard Rhodes, *The Twilight of the Bombs* (New York: Alfred A. Knopf, 2010), p. 171.

¹⁹⁰ Reiss, *Bridled Ambition*, p. 13.

¹⁹¹ South Africa’s Y-Plant also provided enriched uranium for South Africa’s civil nuclear projects, including the SAFARI research reactor (45 percent) and low enriched uranium (LEU) for the two Koeberg power reactors (the only nuclear power station in Africa). The SAFARI reactor’s HEU and Koeberg’s LEU was originally supplied by the United States. However, the US Congress halted the resupply to SAFARI’s fuel in 1976 and, with the enactment of enacted the Nuclear Non-Proliferation Act (NNPA), Koeberg in March 1978. See Walt, Steyn and Loggerenberg, *Armament and Disarmament*, p. 34; Purkitt and Burgess, *South Africa’s Weapons of Mass Destruction*, p. 49; Albright, “South Africa and the Affordable Bomb,” p. 40 and Stumpf, “Birth and Death of the South African Nuclear Weapons Programme”

¹⁹² See, for example, Walt, Steyn and Loggerenberg, *Armament and Disarmament*, 87-89 and Reiss *Bridled Ambition*, p. 13.

¹⁹³ Reiss *Bridled Ambition*, p. 13.

components, so that they could be assembled explosively. Up until this point the weapon would still be safe and the mission could still have been aborted by intervention right from the top.¹⁹⁴

Authorization to employ weapons was reportedly solely under the authority of the “State President.”¹⁹⁵ Authority would run from the South African leader to its Chief of the Defence Force. However, here the Defence Chief could only access the “codes to the instruct the operation further down the command chain” if he obtained *half* of the code from the Chairman of Armscor (the South African government supported armament conglomerate)¹⁹⁶ and the corresponding other half code from the Chairman of the Atomic Energy Commission.¹⁹⁷

¹⁹⁴ Walt, Steyn and Loggerenberg, *Armament and Disarmament*, p. 89.

¹⁹⁵ Walt, Steyn and Loggerenberg likely mean the prime minister. Walt, Steyn and Loggerenberg, *Armament and Disarmament*, p. 88.

¹⁹⁶ Armscor was created in 1968 by an act of parliament. In 1976, Armscor was uniquely expanded to include both procurement and manufacturing. This development was fortuitous for the South African's because with UN Resolution 418's call for sanctions (voluntary in 1977; mandatory in 1979), Armscor was already in a position to be strategically independent from foreign suppliers that complied with the UN's demands.

¹⁹⁷ Walt, Steyn and Loggerenberg, *Armament and Disarmament*, p. 89.

IV: Selected VNSA Incidents and Command and Control

A Note on Methodology

Researchers spent considerable time assessing different methodological approaches aimed at capturing variables relevant to VNSA command and control. The initial approach sought to leverage START's Global Terrorism Database (GTD), which includes information on almost 100,000 incidents of terrorism, through quantitative analysis. Pilot projects were initiated to discover how different combinations of incident variables (for example, a group's ideology, weapons selection, target selection, etc.) might indicate VNSA command and control preferences. To this end, researchers created a dataset of all incidents in the GTD that met two criteria: 1) incidents carried out by known perpetrator organizations, i.e. eliminating all unknown and generic perpetrator labels, and 2) incidents with more than one individual perpetrator unless it was a suicide bombing or an unknown number of perpetrators. The first selection criterion limited the data to cases most likely to have sufficient information available to code the command and control systems utilized (i.e., assertive, delegative, or pre-determined). The second criterion eliminated those cases for which command and control structures were prima facie unnecessary.

From this dataset, researchers generated a random sample of 200 cases that was proportional to the population distribution of ideologies and over-sampled cases involving chemical, biological, and radiological materials. These exotic materials present additional challenges for groups to overcome and thus more closely approximate the [command and control] structures necessary to field a nuclear weapon. After coding 68 test cases, it became apparent that the level of information available in the open sources for most of these randomly selected cases was simply not detailed enough to

Case Studies

M19

Populist/Nationalistic/Socialist Revolutionary
The Palace of Justice Siege, Columbia - 1985
Movimiento 19 de Abril (M19: April 19 Movement)
Pre-Determined Command and Control Configuration

RAF

Socialist/Communist (Marxist-Leninist, Maoist, Stalinist, etc)
Abductions of 1977
Rote Armee Fraktion (RAF: Red Army Faction)
Delegative Command and Control Configuration

ETA

Nationalist/Separatist
Assassination of Spanish Prime Minister
Euskadi ta Askatasuna (ETA: Basque Homeland and Freedom)
Assertive Command and Control Configuration

SPIR

Islamist (Sunni)
Chechen Nord Orst Seige [Moscow theater] - 2002
Chechen Rebels [radicalized nationalists]
Special Purpose Islamic Regiment (SPIR)
Assertive Command and Control Configuration

Chechen Rebels

Nationalist/Separatist
1995 Chechen Budyonovsk Hospital Hostage Crisis
Chechen Rebels [violent Islamist]
Delegative Command and Control Configuration

BR

Socialist/Communist (Marxist-Leninist, Maoist, Stalinist, etc)
Assassination of Spanish Prime Minister Aldo Moro - 1978
Brigate Rosse (BR: The Red Brigades)
Assertive Command and Control Configuration

LeT

Nationalist/Separatist/Religious
The Mumbai Attacks, 2008
Lashkar-e-Taiba (LeT: Army of the Pure)
Assertive Command and Control Type

TTP

Islamist (Sunni)
Assault on Pakistan Army's General Headquarters (GHQ), Rawalpindi, 2009
Tehrik-e-Taliban Pakistan
(TTP: Movement of the Pakistani Taliban)
Delegative Command and Control Configuration

provide meaningful insights into the VNSA's command and control characteristics. Several other attempts were made to utilize such quantitative approaches. None succeeded, due to the lack of sufficiently granular data.

Consequently, focus shifted to qualitative approaches. Therefore, the team opted to produce case studies of particular historically significant events, for which there is generally more data available, to identify the more specific details of terrorists' operational command and control systems. The result is eight discrete profiles of terrorism incidents, presented below. Each case was selected to show variance across a variety of factors: degree of complexity, uniqueness of circumstance, operational objectives, and perpetrator ideology. A summary of cases is presented in Table 2 and is followed by the full cases

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Table 2: VNSA Command and Control Group Profile Summary

VNSA Command and Control Group Profile Summary									
Organization name/event	Org. age at time of attack	No. of perp.	Tactic	Leadership style	Command and control style	Outcome for terrorist org.	Resources	Assimilation to target environment	Risk threshold
M19 – Palace of Justice Siege (1985)	15 years	35	Armed attack	Hierarchical – led by Supreme Commander	Predetermined	Failed – no negotiations, all perpetrators killed	Financial – Cuba, Nicaragua Logistical/training – Cuba	Full – Native Colombians	Tolerant
RAF – Schleyer abduction (1977)	7 years	5	Kidnap/ Assassin.	Likely cellular	Delegative	Failed – prisoners not released	Logistical/training – PLO, PFLP, Baader-Meinhof Gang, IRA, others	Full – Native Germans	Neutral
ETA – Spanish PM assassin. (1973)	14 years	4	Bombing/ Assassin.	Hierarchical – led by Executive committee	Assertive	Success - PM and bodyguards assassinated	Basque community	Partial – Basque accent differs	Averse
Chechen Rebels (Barayev) – Nord Ost Siege (2002)	6 years	41	Hostage	Hierarchical – strong leader	Assertive	Failed – no negotiations, all perpetrators killed	Financial – mujahedeen groups, Amir al-Khattab	Partial – made up of all Chechens	Tolerant
Chechen Rebels (Basayev) – Budennovsk Hospital (1995)	4 years	50-150	Armed attack/ Hostage	Hierarchical - led by Dudayev's rebel government	Delegative	Success – ceasefire in Chechnya, safe return of rebels	Military – stolen from Russia	Partial – made up of all Chechens	Tolerant
Red Brigades – Aldo Moro Assassin. (1978)	8 years	10	Kidnap/ Assassin.	Cellular	Assertive	Failed – no release of prisoners, decrease of public support	Financial - robberies Human resources – PLO, German Red Army Faction	Full – Native Italians	Tolerant
LeT – Mumbai (2008)	21 years	10	Armed Attack	Hierarchical – strong leader	Assertive	Success – 149 civilian casualties/panic	Financial – ISI, Jamaat-ud-dawa charity, al qaida	Not assimilated – Pakistani Punjabis	Tolerant
TTP – Army GHQ (2009)	2 years	10	Armed Attack	Umbrella organization	Delegative	Failed – prisoners not released, 9 perpetrators killed	Financial – al Qaida, robberies	Full – Sunni Pakistanis	Tolerant

A. M19

VNSA Command and Control Group Profile

Movimiento 19 de Abril (M19: April 19 Movement)

The Palace of Justice Siege, 1985¹⁹⁸

Group Type: Populist/Nationalistic/Socialist Revolutionary

Command and Control Type: Pre-Determined

Overview¹⁹⁹

Movimiento 19 de Abril (April 19 Movement) [hereafter M19], a nationalistic socialist group formed in 1972 to mobilize the population of Colombia to overthrow the government and institute a freer and more democratic society²⁰⁰, carried out an assault on the Palace of Justice in Bogotá, Colombia starting on November 6, 1985, at 11:00am, and continuing until 2:30pm on November 7, 1985. The Palace of Justice was chosen as a target for its prominence in the Colombian legal world, and for its ability to attract the public's attention.²⁰¹ The organization also believed that in taking the Supreme Court Justices hostage, they could force the Colombian government into negotiations to demand that the President or his representative come to the Palace of Justice to stand "trial" for the crimes he had committed in the breaching of the peace accords between M19 and the Colombian government,²⁰² which resulted in the assassinations of some M19 members.²⁰³

¹⁹⁸ This profile was compiled from the use of the only known book of the incident (firsthand accounts and investigations within the Colombian government and, thus, a potentially biased version) as well as a journal article and several media sources, both in English and Spanish, to determine what exactly occurred during the Palace of Justice Siege in 1985. The information reviewed is informative, but by no means complete, and only an investigation into Colombian print literature as well as court, legal, governmental, and military documents, access to which was not within the resources available to this project, could fully complete this evaluation. A serious point of contention about the events of the 28-hour siege is who killed many of the hostages who never made it out of the Palace of Justice. Conflicting reports accuse both M19 guerrillas and the military forces of killing the hostages. There is no way to definitively tell what happened and there is evidence on both sides to suggest both M19 and the military may be implicated.

¹⁹⁹ The following overview is drawn from Anna Carrigan, *The Palace of Justice: a Colombian Tragedy*. (New York: Four Walls, 1993), passim; Rex Hudson, "Colombia's Palace of Justice Tragedy Revisited: A Critique of the Conspiracy Theory," *Terrorism and Political Violence*, Issue 7, No. 2 (1995), p.100-102; Michael Evans, "Landmark Conviction in Colombia's Palace of Justice Case," *The National Security Archive*, George Washington University, June 11, 2010. Available at: <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB319/index.htm>; and Sergio Salinas, "M-19: From the Mountains To Parliament," *Editorial Ultimo Recurso*, April 2007. Available at: <http://www.ultimorecurso.org.ar/drupi/node/163>.

²⁰⁰ Sergio Salinas, "M-19: FROM THE MOUNTAINS TO PARLIAMENT," *Editorial Ultimo Recurso*, April 2007. Available at: <http://www.ultimorecurso.org.ar/drupi/node/163>; Mauricio Garcia Duran, Vera Grabe Loewenherz, Otty Patino Hormaza, "M-19's Journey from Armed Struggle to Democratic Politics: Striving to Keep the Revolutino Connected to the People," *Berghof Transitions Series*, no. 1 (2008), p. 9; Mark Uhlig, "Santo Domingo Journal; From Guerillas' Camp, A Hazy View of Peace," *The New York Times*, (New York, NY), June 27, 1989; Merril Collett, "Guerrilla Rising in Colombia," *Nation*, Vol. 242, Issue 9 (1986), p. 10.

³ Ana Carrigan, *The Palace of Justice: a Colombian Tragedy*. (New York: Four Walls, 1993), p. 83; Uhlig, "Santo Domingo Journal"; Collett, "Guerrilla Rising in Colombia", p. 264.

²⁰² Carrigan, *The Palace of Justice*, p. 67; Rex Hudson, "Colombia's Palace of Justice Tragedy Revisited: A Critique of the Conspiracy Theory," *Terrorism and Political Violence*, Issue 7, No. 2 (1995), p. 94.

²⁰³ Carrigan, *The Palace of Justice*, p. 67.

The M19 members who carried out the attack were organized into three forces that involved approximately 35 to 40 individuals armed with small arms, machine guns and explosives.²⁰⁴ The first force was the Infiltration Team, which included 7 individuals who entered the Palace of Justice unarmed at 11:00am to scout out the building and to give the signal for the main attack.²⁰⁵ The Rear Vanguard was supposed to be only lightly armed and lay explosives prior to the arrival of the Main Assault Force; however, this team never responded due to a lack of radio communication between the Rear and Main forces.²⁰⁶ The Main Assault Force included 28 heavily armed members whose mission it was to hold off the military and to take the Supreme Court Justices, including Chief Justice Alfonso Reyes Echandia as well as any lower magistrates, clerks or civilians hostage with the intent to use them as bargaining chips in forcing negotiations with the government.²⁰⁷ At approximately 12:30pm, M19 secured their hostages just before a counter-attack by the military. The counter-attack recaptured the basement garage and main levels of the four story building, splitting the M19 force in two and capturing more than half of M19's ammunition stores.

The military immediately focused on the larger of the two M19 guerrilla groups in the facility. In the seven hours following the counter-attack, the military would battle their way up the four stories of the building while M19 made repeated calls for a cease-fire and negotiations. M19's attempts to initiate negotiations included having Chief Justice Reyes call the President, journalists and influential members of government such as the President of the Senate.²⁰⁸ There was also an attempt to use a radio broadcast in which Reyes attempted to plead with the public for support, but the government cut it off almost immediately.²⁰⁹ At 5:30pm, the military began bombarding the building using heavy weapons, including tank fire and anti-tank rockets. As a consequence of the bombardment, the building was set ablaze, and the fire quickly spread. At 7:30pm, military operatives landed on the roof of the building and detonated shaped charges directly over the offices of the Chief Justice, where both M19 guerrillas and hostages had gathered. Through the breach, soldiers poured gunfire and grenades into the offices. However, due to the fire's growing intensity, the military retreated from the building until the fires could be controlled.

As the fires spread throughout the building, the smoke density in the bathroom where the remaining M19 guerrillas and hostages had gathered grew increasingly dangerous. Around 12:00am and at the request of the hostages, the entire group moved to a bathroom one level below to escape asphyxiation. Efforts by firefighters and torrential rains brought the blaze under control, and by 2:00am the military resumed its assault. M19 repelled the assault, and the military again retreated from the building. At 5:30am "Operation Rastillo", as the Colombian military operation was named, began to dislodge M19 with the use of any and all means. This time, to avoid being overrun, M19 was forced to retreat back to the bathroom they held one floor above. For the rest of the morning the military pounded M19's position with tank, rocket, and small arms fire. By 10:00am, they had broken through to M19's last position. At 12:00pm, they began breaching the east wall of the bathroom, using plastic explosives and shaped charges. By approximately 2:00pm, the military broke through and fired a rocket into the bathroom, killing some hostages. At the conclusion of the fighting on November 7, 1985, a combination of fire, explosives and gunfire killed all participating M19 guerrillas and many hostages including Supreme Court Justices and Chief Justice Reyes²¹⁰ in addition to other civilians totalling about 95 casualties.²¹¹ Although M19 had successfully forced the government into

²⁰⁴ Ibid, p. 102.

²⁰⁵ Hudson, "Colombia's Palace of Justice," p. 93 ; Carrigan, *The Palace of Justice*, p. 101.

²⁰⁶ Carrigan, *The Palace of Justice*, p. 102.

²⁰⁷ Ibid, 108.

²⁰⁸ Ibid, pp.123, 132.

²⁰⁹ Carrigan, *The Palace of Justice*, pp. 138-139; Michael Serrill, "Colombia: Mindless Violence in Bogota," *Time Magazine* (New York, NY), April 18 2005; Mark Uhlig, "Santo Domingo Journal; From Guerillas' Camp, A Hazy View of Peace," *The New York Times*, (New York, NY), June 27, 1989

²¹⁰ Carrigan, *The Palace of Justice*, p. 171; Michael Evans, "Landmark Conviction in Colombia's Palace of Justice Case," *The National Security Archive*, *George Washington University*, June 11, 2010. Available at: <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB319/index.htm>.

²¹¹ Duran, "M-19's Journey", p. 14; Serrill, "Colombia: Mindless Violence."

negotiations in the past such as during their 61 day siege of the Dominican Republic's embassy in 1980²¹², the siege of the Palace of Justice did not result in negotiations. Because the embassy attack had targeted foreign diplomats rather than domestic justices, the government may have been more willing to negotiate in the previous incident.²¹³ Furthermore, the Supreme Court rulings had placed the Court in direct confrontation with the military, which was the apparatus controlling the situation and not the President as M19 believed.²¹⁴

Command and Control Analysis: Predetermined

M19 was organized militarily with ranks, titles and strict adherence to orders.²¹⁵ However, despite this rigid operational structure, in theory, M19 had a delegative system, in which subordinates were given the authority to make key decisions and react to changing circumstances without the need to attain approval from the top leader.²¹⁶ Commanders Luis Otero and Andres Almarales assumed authority and had direct control over their units without input or interference from M19 leadership. In practice, however, accounts from the surviving hostages indicated that the assault force never deviated from the original plans laid out by Alvaro Fayad, M19's top military figure, even when evolving facts on the ground behooved the guerrillas to do so.²¹⁷ The paradigm that "the commander is never wrong" was very deeply rooted in the organization.²¹⁸ Therefore, in the attack on the Palace of Justice, M19 acted under a "pre-determined" authority system, in which the protocols and instructions were laid out before beginning the operation and operatives strictly adhered to them. Because the command and control structure of the organization was rigid, it prevented M19 from adapting to an evolving situation in which their initial assumptions such as the role of the President and the importance of their hostages vis-à-vis the military were inaccurate, thereby limiting the success of their attack in terms of meeting their goals.

²¹² Country-data.com, "The 19th of April Movement," *Country-Data*, December 1988. Available at: <http://www.country-data.com/cgi-bin/query/r-3127.html>; Duran, "M-19's Journey," p. 14.

²¹³ Carrigan, *The Palace of Justice*, p. 177; Hudson, "Colombia's Palace of Justice," p. 110.

²¹⁴ Carrigan, *The Palace of Justice*, pp. 84, 147.

²¹⁵ Duran, "M-19's Journey," p. 26.

²¹⁶ Ibid, p. 26.

²¹⁷ Carrigan, *The Palace of Justice*, p. 83.

²¹⁸ Duran, "M-19's Journey," p. 26.

B. RAF

VNSA Command and Control Group Profile

Rote Armee Fraktion (RAF: Red Army Faction)**Abductions of 1977**

Group Type: Communist/Socialist

Command and Control Type: Delegative

Overview

On September 5, 1977 at 5:50pm in Cologne, Germany, members belonging to the Siegfried Hausner Commando of the Rote Armee Fraktion (Red Army Faction)[hereafter RAF], a Marxist/Maoist successor to the Baader-Meinhof group that sought to fight against international imperialism from Europe to the Third World²¹⁹, abducted Dr. Hanns Martin Schleyer, a prominent capitalist, the President of the Federal Association of German Industries, and the President of the Employers Association.²²⁰ Armed with pistols, a machine gun and a shot gun, the Commando blocked Schleyer's convoy using a yellow Mercedes.²²¹ Then, a woman pushing a blue baby carriage walked out in front of Schleyer's car to prevent it from swerving around the Mercedes. After having stopped the convoy, five members of RAF attacked, killing the four law enforcement officers escorting Schleyer's vehicle and kidnapping Schleyer.²²² The RAF abducted Schleyer so that he could be exchanged for 11 RAF leaders, who were being held by the West German government. Not only were the leaders to be freed, but they were also to be given 100,000 Deutsche Marks and allowed to travel to the country of their choosing upon their release.²²³ However, 43 days after Schleyer's capture, four RAF prisoners attempted suicide. Three of the four died as a result of gunshot wounds to the head and hanging. The fourth prisoner attempted to stab herself, but did not die of her wounds. In response to the suicides, the Commando executed Schleyer and dumped his body in Mulhouse, France on October 18, 1977.²²⁴

Command and Control Analysis: Delegative

The RAF was organized into two distinct groups: the Hard Core Group and the Support Group. The Hard Core Group was made up of 10 to 20 people who actually carried out the terrorist attacks. This group was sometimes further divided into "commando" groups of three to five operatives who would be tasked with

²¹⁹ Noe, Denise. "The Baader Meinhof Gang: A Kidnapping and A Countdown." Available at: http://www.trutv.com/library/crime/terrorists_spies/terrorists/meinhof/12.html; "A Brief History of the Red Army Faction" *Arm the Spirit* (2004). Available at <http://www.hartford-hwp.com/archives/61/191.html>; "Case Study 1. The Kidnapping/Assassination of Hanns Martin Schleyer." Available at: http://www.globalsecurity.org/intell/library/policy/dod/part6_ct_analysis_course.htm.

²²⁰ "Case Study 1. The Kidnapping/Assassination of Hanns Martin Schleyer."

²²¹ Noe, "The Baader Meinhof Gang: A Kidnapping and A Countdown"; "Case Study 1. The Kidnapping/Assassination of Hanns Martin Schleyer."

²²² Ibid.

²²³ André Moncourt and J. Smith, "The Red Army Faction, A Documentary History Projectiles for the People," 2009. Available at: <http://www.germanguerrilla.com/red-army-faction/index.html>. (Note: translated RAF documents consulted for this report are: The Urban Guerilla Concept, April 1971; The Schleyer Communiqués, September 5th to October 13th 1977; Final Communiqué Regarding Hanns Martin Schleyer, October 19th 1977; "The Urban Guerrilla Is History..." The Final Communiqué From The Red Army Faction (RAF), March 1998; A note regarding the current situation – by some who have been RAF members at various points in time, May 2010); "Case Study 1. The Kidnapping/Assassination of Hanns Martin Schleyer"; Noe, "The Baader Meinhof Gang: A Kidnapping and A Countdown"

²²⁴ Noe, "The Baader Meinhof Gang: A Kidnapping and A Countdown".

carrying out a particular operation.²²⁵ The Support Group was composed of the several hundred RAF supporters. These people provided propaganda and logistical support to the hardcore group.²²⁶ Based on this organizational structure, operational procedures, and other group characteristics, it is clear that RAF relied on a delegative system to carry out attacks. For example, given the RAF's leadership's imprisonment at the time of the abduction and the stated demands by the perpetrators for the release of certain members, the Siegfried Hausner Commando acted with almost complete autonomy.²²⁷ Because it would be unlikely that the captives would have felt the need to orchestrate their own release, this demonstrates the ability of various "commando groups" to carry out attacks without direct orders from leaders. Furthermore, law enforcement involved in the negotiations stated that the perpetrators' communication was clear and consistent implying that their decisions were not reliant upon orders or authorization from jailed leaders.²²⁸ Therefore, given the small number of operatives, the imprisonment of leaders and the nature of negotiations, decisionmaking appears to have been shared rather than held by a central organizational leadership. This allowed for flexibility in the RAF's actions when they decided to kill Schleyer following the deaths of three RAF leaders whom they sought to have freed.

²²⁵ Jenkins, John. "Red Army Faction (RAF) *Encyclopedia Britannica*" (2010). Available at: <http://www.britannica.com/EBchecked/topic/494068/Red-Army-Faction> (accessed October 24, 2010); "Red Army Faction (RAF)." June 2005. Available at: <http://www.globalsecurity.org/military/world/para/raf.htm>.

²²⁶ "A Brief History of the Red Army Fraction;" "Red Army Faction (RAF)."

²²⁷ Noe, "The Baader Meinhof Gang: A Kidnapping and A Countdown;" "Case Study 1. The Kidnapping/Assassination of Hanns Martin Schleyer."

²²⁸ André Moncourt and J. Smith, "The Red Army Faction, A Documentary History Projectiles for the People," 2009. Available at: <http://www.germanguerrilla.com/red-army-faction/index.html>. (Note: translated RAF documents consulted for this report are: The Urban Guerilla Concept, April 1971; The Schleyer Communiqués, September 5th to October 13th 1977; Final Communiqué Regarding Hanns Martin Schleyer, October 19th 1977; "The Urban Guerrilla Is History..." The Final Communiqué From The Red Army Faction (RAF), March 1998; A note regarding the current situation – by some who have been RAF members at various points in time, May 2010).

C. ETA

VNSA Command and Control Group Profile

Euskadi ta Askatasuna (ETA: Basque Homeland and Freedom)

Assassination of Spanish Prime Minister

Group Type: Nationalist/Separatist

Command and Control Type: Assertive

Overview

Euskadi ta Askatasuna (Basque Homeland and Freedom) [hereafter ETA], an ethnonationalist group dedicated to the liberation of the Basque homeland, which consists of four provinces in Spain and three in southern France,²²⁹ planned and executed the assassination of Prime Minister Admiral Luis Carrero Blanco of Francisco Franco's government, in Madrid, Spain at 9:36am on December 20, 1973.²³⁰ The Admiral was an attractive target to the organization because he could have succeeded Franco and because his church routine made his activities surrounding Sunday mass highly predictable.²³¹ The attack, which took nearly a year to organize,²³² had initially been planned as a kidnapping. ETA would then have leveraged him to secure the release of political/militant prisoners held by the Spanish government.²³³ However, the plan was changed to an assassination plot after an increase in the Admiral's security detail precluded a kidnapping.²³⁴ Furthermore, the perpetrators calculated that the Admiral's survival could cause more hardship for ETA and the Basque people in the future. Also, in the event that the Spanish government took a hard line and refused to negotiate, they would have had to kill the Admiral anyway.²³⁵ Once ETA had decided on an assassination plot and once the Executive Council had approved the plan, the commando cell dug a tunnel underneath the road where the Admiral's car would pass, planted approximately 80 kilograms of explosives,²³⁶ and waited for him to leave mass. When the Admiral's car drove over the target area, the perpetrators detonated the explosives, and the vehicle was hurled five stories over a church. The Admiral and his bodyguard detail were killed, but the four perpetrators escaped. At the time of the Admiral's assassination, ETA believed very much in maintaining its public image. Because they were conscious of the harm that collateral damage might have had on their image among the general population, great pains were taken during the planning and execution of the bombing to make sure innocent civilians were not killed.²³⁷

ETA, founded in 1958-1959, has continued to operate in some capacity until 2010 when it called another ceasefire in an attempt to negotiate with the Spanish government.²³⁸ ETA is Europe's oldest terrorist

²²⁹ Ignacio Sánchez-Cuenca, "The Persistence of Nationalist Terrorism: The Case of ETA," *Terrorism and Political Violence* (2008) p. 5. Available at: [www.march.es/ceacs/proyectos/dtv/pdf/ETA%20\(Kledja\).pdf](http://www.march.es/ceacs/proyectos/dtv/pdf/ETA%20(Kledja).pdf); Carlos Barros and Luis Gil-Alana, "The timing of ETA terrorist attacks," *Journal of Policy Modeling*, Vol. 28, Issue 3 (2005), p. 336. Available at: http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V82-4JKBV20-4&_user=961305&_coverDate=04%2F30%2F2006&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view=c&_acct=C000049425&_version=1&_urlVersion=0&_userid=961305&md5=ecf0fe84038e1aa262e50aa743f5a11d&searchtype=a.

²³⁰ Julen Agirre, and Barbara P. Solomon, *Operation Orgo: The Execution of Admiral Luis Carrero Blanco*, (New York: Quadrangle/ The New York Times Book Co., 1975), pp. 5, 101, 140.

²³¹ Ibid, pp. 4-5.

²³² Ibid, pp. 125-126.

²³³ Ibid, p. 3.

²³⁴ Ibid, p. 73.

²³⁵ Ibid, p. 18.

²³⁶ Ibid, pp. 99-100.

²³⁷ Ibid, p. 74

²³⁸ Wayne State University, "Birth and Ideology of ETA" 1999. Available at: <http://www.cla.wayne.edu/polisci/kdk/westeurope/sources/birtheta.html>; Findlay, Stephanie. "Can Separatists Be

organization and it has committed thousands of attacks including assassinations, kidnappings and bombings to further its cause.

Command and Control Analysis: Assertive

ETA's command and control structure can be characterized as assertive for three reasons:

1. While commando cells have creative license to plan attacks, they are beholden to approval from the governing council before carrying out operations. In the case of the Admiral's assassination, for example, the perpetrators were initially tasked to devise a plan to kidnap the Admiral. They then confirmed their plan with ETA leadership and discussed additional support required during the Sixth Assembly of ETA.²³⁹ Once the commandos learned that the Admiral's guard detail had significantly increased, they communicated with ETA leadership that, instead of a kidnapping, an assassination would be the best course of action. Once a new plan was devised and communicated to ETA leadership, they received permission to proceed.
2. While Commando cells are given autonomy to develop operations in their regional locations, members are limited in their assimilation to the environment by a cultural barrier. Accents distinguish the Basque ETA from the Castilian Spanish inhabitants of places such as Madrid. The Commandos, therefore, must rely on the leadership cadre located in the Basque homeland for resources and support.
3. ETA can be divided into two parts: the hardcore group and the periphery group. The hardcore group of the organization includes not only the Executive Committee, but also the armed commandos who carry out the attacks. The periphery group makes up the network of supporters, providing financing, intelligence, housing, border crossing, etc. but has little to no participation in actual violence.²⁴⁰ Despite operational cells and an extensive peripheral network of supporters, ETA is known to have a rigidly hierarchical structure with an Executive Committee forming its top leadership.²⁴¹

Trusted?" *Maclean's*, Vol. 123, Issue 37 (2010) p. 42. Available at: <http://web.ebscohost.com.proxy-um.researchport.umd.edu/ehost/detail?vid=1&hid=108&sid=80d991cb-75de-4ada-a6a7-6255788f73a3%40sessionmgr111&bdata=JnNpdGU9ZWZvc3QtbGl2ZQ%3d%3d#db=aph&AN=53787023#db=aph&AN=53787023#db=aph&AN=53787023>.

²³⁹ Agirre, p. 55

²⁴⁰ Sánchez-Cuenca, "The Persistence of Nationalist Terrorism: The Case of ETA," pp. 9-10.

²⁴¹ Ibid, p. 12S.

D. Chechen Nord Orst Seige²⁴²

VNSA Command and Control Group Profile

**полк специальной цели исламский (Special Purpose Islamic Regiment)
Nord Ost Siege, 2002**

Group Type: Nationalist/Separatist, Religious

Command and Control Type: Assertive

Overview

The Nord Ost Siege, also known as the October 2002 Moscow theater hostage crisis, started at 9:05pm on October 23, 2002 and continued until 5:30am on October 26, 2002.²⁴³ Mosvar Barayev led 41 members of полк специальной цели исламский (Special Purpose Islamic Regiment) [hereafter SPIR] in an assault on the Palace of Culture of the Podshipnikov Zavod in Moscow, Russia, taking 850 hostages including both the actors in the play as well as the spectators.²⁴⁴ The theater was likely targeted because it would enable the organization to force the government into negotiations by leveraging a large number of Russian hostages.²⁴⁵ In exchange for the release of the hostages, SPIR demanded a full Russian military pullout from Chechnya and recognition of an independent Chechen state.²⁴⁶ SPIR is a nationalist/separatist and religious organization formed in 1996 by Abri Barayev.²⁴⁷ After its founding as a nationalist/separatist organization, SPIR became increasingly Islamic in both membership and goals. Islamic militants were welcomed into SPIR because they provided more manpower as well as a link to funding from Islamic terrorist organizations.

The SPIR terrorists were led by Movsar Barayev and consisted of 22 men and 19 women.²⁴⁸ The Chechens began their assault right before the play's intermission and used the noise of the show to cover their initial entry into the theater lobby.²⁴⁹ After securing the lobby and hallways, the Chechens entered the auditorium, taking those inside by surprise.²⁵⁰ The men patrolled the theater's foyer while the women, armed with explosive suicide belts, guarded the hostages in the auditoriums. On Barayev's command, the women were prepared to detonate the explosives strapped to their bodies.²⁵¹ All but one of the terrorists were Chechen natives. One of Barayev's two lieutenants was an Arab volunteer. Early into the siege, the Chechens released approximately 150 hostages, most of whom were children, Georgian citizens, foreigners, or Muslims.²⁵² Although a police barricade had been erected outside of the theater, Russian security forces

²⁴² For a discussion of changing Chechen Rebel ideology from the Nord Orst Seige (1995) to the Budyonnovsk hospital hostage crisis, please see footnote 268.

²⁴³ Dan Reed, *Terror in Moscow*, directed by Dan Reed (HBO, 2003), 60 Minutes.; "Chechen gunmen seize Moscow theatre," CNN, October 24, 2002. Available at: <http://edition.cnn.com/2002/WORLD/europe/10/23/russia.siege/>.

²⁴⁴ Reed, *Terror in Moscow*.

²⁴⁵ Ibid.

²⁴⁶ Ibid; "Chechen gunmen seize Moscow theatre"; Nick PatonWalsh and Jonathan Steele, "Chechen gunmen storm Moscow," *The Guardian*, October 23, 2002. Available at: <http://www.guardian.co.uk/world/2002/oct/24/russia.chechnya>; "Hostage-takers 'ready to die,'" Traynor, "Troops bring freedom and death."

²⁴⁷ START, START, "Terrorist Organization Profile."

²⁴⁸ Ibid.

²⁴⁹ Reed, *Terror in Moscow*.

²⁵⁰ "Ugly mood on Moscow streets," CNN, Oct. 24, 2002. Available at: http://articles.cnn.com/2002-10-23/world/russia.mood_1_chechnya-russian-special-forces-chechens?_s=PM:WORLD.

²⁵¹ Reed, *Terror in Moscow*.

²⁵² "Chechen gunmen seize Moscow theatre"

and officials stated at the onset of the hostage crisis that an assault on the theater would not take place unless the Chechen terrorists began executing hostages.

On October 24, the Chechens allowed some Russian members of parliament and two doctors inside the theater to carry out the body of a woman whom SPIR had executed after she had broken through the police barricade the previous night.²⁵³ Two days into the siege, the Russian Federal Security Service's (FSB) elite counterterrorism unit, Alpha Group, began planning a rescue operation.

On October 25, Barayev announced that they would begin executing hostages starting at midnight in order to speed up a response from the Russian government.²⁵⁴ An hour before the midnight deadline, one of Barayev's lieutenants received a call from the Russian government's special envoy to Chechnya, who said that he would fly to Moscow to meet face-to-face with Barayev in the theater to negotiate. Barayev and his fellow rebels felt this to be a great victory and tensions were lowered. However, at 11:25pm, a man whose son was taken hostage broke through the police barricade and was executed by SPIR.²⁵⁵ The execution led to a hostage panicking. He ran towards a large bomb that was situated in the middle of the theater. One of the gunmen fired at the panicked hostage, missed, and hit two other hostages, killing one and injuring another. Under Barayev's orders, an ambulance was allowed to take the injured hostage away for treatment. Barayev made it clear to the Russians that the hostages were shot by accident, and that there were no executions taking place.²⁵⁶

At 5:30am on October 26, the Russian commandos launched their rescue operation.²⁵⁷ The Russian envoy's phone call was a ruse to buy more time. Before Russian troops entered the theater, an unknown sedative agent was pumped into the theater through the ventilation system in an effort to render the Chechens unconscious so they would not be able to fight back or set off their explosives.²⁵⁸ The Chechen men fled from the gas, leaving the women unconscious inside the theater. Some of those unaffected by the sedative were able to escape the theater to safety. After allowing the gas to take effect, the Russian commandos stormed the theater, killing Barayev in a shootout. All of the SPIR members were either killed fighting the Russian commandos or executed at the end of the Russian assault. None of SPIR's explosives were detonated during the raid. At the conclusion of the crisis, SPIR had killed two people and the Russian forces had killed all 41 terrorists.²⁵⁹ As a result of the sedative agent used by the Russians in the rescue raid, 129 hostages died.²⁶⁰

Command and Control Analysis: Assertive

Mosvar Barayev became the leader of SPIR after the 2001 death of its founder, Arbi Barayev.²⁶¹ As Barayev was the first leader to be publicly identified by the organization, it can be ascertained that little information is

²⁵³ "Seven Hostages Freed in Moscow Siege." BBC News. Oct. 25, 2002. Available at <http://news.bbc.co.uk/2/hi/europe/2359491.stm>.

²⁵⁴ Reed, *Terror in Moscow*.

²⁵⁵ "How special forces ended siege." BBC News. Oct. 29, 2002. Available at <http://news.bbc.co.uk/2/hi/europe/2363601.stm>.

²⁵⁶ Ibid.

²⁵⁷ "How special forces ended siege." BBC News. Oct. 29, 2002. Available at <http://news.bbc.co.uk/2/hi/europe/2363601.stm>.

²⁵⁸ Ibid.

²⁵⁹ Reed, *Terror in Moscow*; "Hostage-takers 'ready to die,'" BBC, October 25, 2002. Available at: <http://news.bbc.co.uk/2/hi/europe/2360735.stm>.

²⁶⁰ Reed, *Terror in Moscow*.

²⁶¹ Ian Traynor, "Troops bring freedom and death to theatre of blood," *The Observer*, October 26, 2002. Available at: <http://www.guardian.co.uk/world/2002/oct/27/russia.chechnya>; START, "Terrorist Organization Profile."; Pike, John. Federation of American Scientists – Intelligence Resource Program. "Special Purpose Islamic Regiment (SPIR)." May 1, 2003. Available at <http://www.fas.org/irp/world/para/spir.htm>.

available with regards to the decisionmaking structure within SPIR.²⁶² However, given his role as the commander of SPIR and his actions during the hostage crisis, the command and control structure of the organization is best described as assertive. Further evidence of Barayev's role in the planning of the attack may be his disappearance from Chechnya prior to the assault, which led to speculation that he may have been in Moscow planning the theater assault at that time.²⁶³ While other Chechen leaders, such as Shamil Basayev, sanctioned the attack,²⁶⁴ there is no evidence to suggest that the planning and execution of the Nord Ost Siege required the approval of any other elements of the organization. Rather, Barayev appeared to make all of SPIR's major decisions during the crisis. For example, Barayev made no attempts to contact anyone higher up in the chain of command outside the theater during the siege. Second, none of the female suicide bombers who were not rendered unconscious by the sedative agent detonated their explosives during the Russian rescue attempt because they did not receive orders from Barayev telling them to do so.²⁶⁵ Third, after one hostage was injured by gunfire, Barayev ordered that an ambulance take the injured hostage away for treatment, despite opposition from his followers.²⁶⁶ Fourth, all contact between the terrorists and reporters and Russian negotiators was through Barayev;²⁶⁷ although other terrorists were questioned or shown on camera, Barayev was the primary point of contact. Finally, the only two people killed by the terrorists during the hostage crisis were only killed based on Barayev's orders to do so. Therefore, although information about the internal structure of the organization is lacking, available evidence suggests that Barayev was not only acting autonomously within the theater, but that he had likely planned the attack and was likely making the decisions for the organization as a whole including the initial decision to storm the theater.

²⁶² US Department of State. "Chapter 8: Foreign Terrorist Organizations." Country Reports on Terrorism - 2005. Office of the Coordinator for Counterterrorism. Apr. 28, 2006. Available at <http://www.state.gov/j/ct/rls/crt/2005/65275.htm>.

²⁶³ Quinn-Judge, Paul. "The Chechen Suicide Squad." TIME. Nov. 4, 2002. Available at <http://www.time.com/time/magazine/article/0,9171,1003603,00.html?iid=chix-sphere>.

²⁶⁴ Ibid.

²⁶⁵ Reed, *Terror in Moscow*.

²⁶⁶ Ibid.

²⁶⁷ "Hostage-takers 'ready to die,'" BBC, October 25, 2002. Available at: <http://news.bbc.co.uk/2/hi/europe/2360735.stm>.

E. Chechen Budyonnovsk Hospital Hostage Crisis

VNSA Command and Control Group Profile

Chechen Rebels Budennovsk Hospital Hostage Crisis, 1995

Group Type: Nationalist/Separatist²⁶⁸

Command and Control Type: Assertive

Overview

The Budennovsk (also spelled Budyonnovsk) hospital hostage crisis began on June 14, 1995 and continued until June 19, 1995.²⁶⁹ Shamil Basayev, an infamous Chechen warlord, led between 50 and 150 handpicked Chechen fighters armed with automatic rifles, machine guns and grenade launchers on a raid into Russia in order to take a large number of Russians hostage.²⁷⁰ Basayev and his fighters raided the town of Budennovsk in southern Russia, eventually seizing control of Budennovsk's hospital and taking an estimated 1,500 Russians hostage.²⁷¹ The initial target had been Moscow, but the price of bribing Russian officials was too high so a town 120 kilometers outside of Chechnya was chosen.²⁷² The Chechen rebels' objective was to use the hostages as leverage to coerce the Russian government into suspending hostilities in Chechnya and to begin peace talks with Dzhokhar Dudayev's separatist government. The Budennovsk hospital hostage crisis was a watershed moment for the Chechen struggle against Russia.²⁷³ The Russians launched two rescue attempts to free the hostages, both of which failed. Russia was, therefore, forced to negotiate with Basayev in order to release the hostages and eventually agreed to a ceasefire in Chechnya. The handling and aftermath of the hostage crisis created a serious political disaster for Russian President Boris Yeltsin.

The Budennovsk hospital crisis occurred at a time when Russia was gaining the upper hand in its war in Chechnya. During the First Chechen War (1994-1996), Chechen leaders vowed to bring the war to Russian

²⁶⁸ At this point in time Chechen rebels were acting as nationalist/separatist as opposed to jihadists. As Chechen expert Gordon Hahn explains, "[Shamil] Basaev had already been to Khost [Afghanistan] in April 1994 but to little effect. All [of Basaev's entourage] got sick and they flew home without training. Even if Basaev had funding from [al Qaida] already, it's not clear that he had already become a convert. [Emir] Khattab came to the North Caucasus probably after 1995 and even if before he would have had little time to spread much jihadi thought. So in general the Sufi nationalist interpretation of Basaev would be correct in 1995... The [Chechen Republic of Ichkeria] was still overwhelmingly Sufi and Chechen nationalist at the time." Gordon Hahn in telephone interview with Charles P. Blair (April 12, 2012).

²⁶⁹ Valentin Eliseenko, "Budennovsk Tragedy: Chechnya's Ricochet," *La Pensee Russe*, June 24-30, 1995. Available at: <http://www.oocities.org/siliconvalley/pines/4414/buden.html>; Dianne Sumner, "Success of Terrorism in War: The Case of Chechnya," Naval Postgraduate School (Summer 1999.) Available at: <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ada354487>.

²⁷⁰ Eliseenko, "Budennovsk Tragedy: Chechnya's Ricochet."; Raymond C. Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev," *Military Review*, June/July 1997. Available at: <http://fmso.leavenworth.army.mil/documents/shamil/shamil.htm>; Sumner, "Success of Terrorism in War: The Case of Chechnya."

²⁷¹ Estimates of the total number of hostages varies, START and CNN list the number of hostages at 2,000 while *The Washington Post* and Raymond Finch state that there were approximately 1,000 or 1,500 hostages respectively. Valentin Eliseenko claimed that the number of hostages could have been as high as 2,500. Here, we will use a conservative average based on the 1,000, 2,000 and 1,500 estimates as these estimates seem the most common.

²⁷² Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev."; Fred Hiatt, "Hostage Crisis Further Damaging Yeltsin's Already Low Popularity," *The Washington Post*, June 18, 1995. Available at:

<http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=3S7T-4W50-0088-P4WH&csi=8075&oc=00240&perma=true>.

²⁷³ Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev."

territory. On June 14, 1995, Shamil Basayev and his fighters crossed the Chechen border into Russia's Stravopol District. Basayev and his fighters traveled hidden in coffin-filled trucks that were supposedly carrying Russian war dead and led by a fake Russian police vehicle.²⁷⁴ Basayev was also able to bribe Russians guarding border checkpoints to ensure that the Chechen rebels safely crossed into Russia.²⁷⁵ After a routine stop, Russian police escorted Basayev's convoy to the police headquarters in Budennovsk, at which point the Chechen rebels poured out of their trucks and opened fire on the Russian police officers and attacked the city of Budennovsk, firing rockets at cars, setting a bank on fire, attacking the main market, and raising the Chechen flag over Budennovsk's town hall.²⁷⁶ Eventually, Basayev and his fighters gained control over Budennovsk's hospital, sealing off the exits. In their initial attack, 91 Russians, including 20 police officers and wounded Russian soldiers in the Budennovsk hospital, were killed by the Chechens. The hospital was chosen not only because of the large number of potential hostages, but also because some of Basayev's fighters had been injured in the initial fighting.²⁷⁷

Once in control of the hospital, Basayev issued three demands to the Russian forces that surrounded the hospital: 1.) Russia must withdraw immediately from Chechnya. 2.) President Yeltsin must immediately begin talks with General Dudayev of Chechnya. 3.) The Chechen rebels must be allowed to meet with reporters.²⁷⁸ Before Basayev's first press conference from the hospital basement on the morning of June 15, Basayev ordered the execution of five hostages because the journalists did not arrive on time.²⁷⁹ During Basayev's first press conference, Basayev added two new demands to his original three: amnesty for all Chechen fighters and free elections for Chechnya.²⁸⁰ Basayev also made it clear that more hostages would be killed if any of Basayev's fighters were harmed. Five hostages would be executed if a Chechen rebel was wounded while ten would be executed if a Chechen rebel was killed. From the morning of June 15 to the morning of June 17, negotiations between Basayev and the Russians were held hourly to no avail with sporadic gunfire erupting.

On June 17, Russian Special Forces launched two attempts to retake the hospital, both of which were disastrous failures. The first rescue attempt began at 5:30am and the second attempt was launched at 2:00pm. More than 100 hostages were killed as a result of the two failed attempts by the Russian military. While exact numbers are not known, it is believed that more hostages were killed during the rescue attempts by Russian soldiers than by Chechen rebels. However, the Chechen rebels also used the hostages as human shields, increasing hostage deaths during the Russian attacks.²⁸¹ In between the two failed rescue attempts, Basayev released 150 children and pregnant women who were being held hostage.²⁸² It was not until the fifth day of the crisis, June 18, that the Russian government began considering negotiating with Basayev to end the hostage crisis.

Negotiations between Basayev and the Russian government were handled personally by the Russian Prime Minister, Victor Chernomyrdin, by phone and were broadcast on Russian television channels nationally. Negotiations continued through the 19th and ended on the 20th. Over the course of the negotiations, the

²⁷⁴ Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev."; Sumner, "Success of Terrorism in War: The Case of Chechnya."

²⁷⁵ Ibid.

²⁷⁶ Ibid.

²⁷⁷ Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev."

²⁷⁸ Eliseenko, "Budennovsk Tragedy: Chechnya's Ricochet."; Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev."; Sumner, "Success of Terrorism in War: The Case of Chechnya."; Michael Specter, "Chechen Rebels Said to Kill Hostages at Russian Hospital." *The New York Times*. Jun. 16, 1995. Available at:

<http://www.nytimes.com/1995/06/16/world/chechen-rebels-said-to-kill-hostages-at-russian-hospital.html>

²⁷⁹ Michael Specter, "Chechen Rebels Said to Kill Hostages at Russian Hospital,"

²⁸⁰ Ibid.

²⁸¹ Ibid.

²⁸² Steven Erlanger. "Russian Troops, in Two Assaults, Fail to Oust Rebels." Jun. 18, 1995. Available at <http://www.nytimes.com/1995/06/18/world/russian-troops-in-two-assaults-fail-to-oust-rebels.html?pagewanted=all&src=pm>

Chechens released some of their hostages, with a total of 400 being released by 4:30pm on June 18.²⁸³ In the end, Prime Minister Chernomyrdin agreed to Basayev's demands for a ceasefire in Chechnya and for peace negotiations. It was also agreed that the Russian government would provide Basayev and his fighters with safe transportation back to Chechnya. In order to guarantee the safety of his rebels, Basayev demanded "volunteer hostages," mostly journalists and Russian Duma deputies, to travel in the convoy with the rebels back to Chechnya as protection. On June 20, a convoy of six buses and a refrigerated truck (to carry the bodies of dead Chechens) transported the Chechen rebels as well as approximately 100-120 "volunteer hostages" safely away from Budennovsk back to Chechnya.²⁸⁴ This crisis marks the first time that Chechen rebels used terror tactics against Russian civilians.²⁸⁵ At the conclusion of the crisis, between 129 and 154 civilians were killed with an additional 415 wounded.²⁸⁶

Command and Control Analysis: Delegative

Basayev was a senior leader amongst the Chechen fighters and was a lieutenant in Dudayev's rebel government.²⁸⁷ While Dudayev did not have control of all armed Chechens at the time, it is important to note that Basayev was quite loyal to Dudayev.²⁸⁸ Therefore, although Basayev was acting on behalf of Dudayev's rebel government, Basayev had extensive autonomy in responding to the events unfolding during the crisis, which suggests a delegative style of command and control. All of the major decisions and actions during the hostage crisis were taken or ordered by Shamil Basayev himself without evidence of consultations with Dudayev or others in his government. Furthermore, Basayev was the only Chechen to negotiate with Prime Minister Victor Chernomyrdin, indicating that he held primary decisionmaking power during the crisis.²⁸⁹ Finally, Basayev was the only Chechen who held press conferences from inside the hospital and was the only Chechen to be interviewed by journalists. Because Basayev was able to respond to the events as they unfolded and to alter the initial plan of attack as necessary, a delegative command and control structure, in this case, helped enable Basayev to progressively increase pressures on the Russian government, which ultimately resulted in a cessation of combat in Chechnya and negotiations between Russia and Dudayev.²⁹⁰

²⁸³ James P. Gallagher, "Russia Blinks But Chechen Rebels Balk: Guerrilla Raiders Still Hold Hostages After Moscow Offers Truce," Jun. 19, 1995. Chicago Tribune. Available at http://articles.chicagotribune.com/1995-06-19/news/9506190189_1_chechen-commander-shamil-basayev-chernomyrdin

²⁸⁴ Agentura, "Budennovsk." Available at: <http://www.agentura.ru/timeline/1995/basaev/>; Sumner, "Success of Terrorism in War: The Case of Chechnya."

²⁸⁵ Sumner, "Success of Terrorism in War: The Case of Chechnya."

²⁸⁶ Sumner, "Success of Terrorism in War: The Case of Chechnya,"; Gazeta, "History of Chechen rebels' hostage taking." Available at: <http://www.gazeta.ru/2002/10/24/HistoryofChe.shtml>

²⁸⁷ C.J. Chivers, "The Chechen's Story: From Unrivaled Guerilla Leader to the Terror of Russia," *The New York Times*, September 14, 2004. Available at: <http://travel.nytimes.com/2004/09/15/international/europe/15chechen.html?pagewanted=1&ref=shamilbasayev>; Specter, "Chechen Rebels Said to Kill Hostages at Russian Hospital,"

²⁸⁸ Ibid.

²⁸⁹ Chivers, "The Chechen's Story: From Unrivaled Guerilla Leader to the Terror of Russia."

²⁹⁰ Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev"; Sumner, "Success of Terrorism in War: The Case of Chechnya,";

F. Aldo Moro Assassination

VNSA Command and Control Group Profile
Brigate Rosse (BR: The Red Brigades)

Assassination of Italian Prime Minister Aldo Moro, 1978

Group Type: Communist Socialist

Command and Control Type: Assertive

Overview

On March 16, 1978 at 9:00am,²⁹¹ the leftist group known as Brigate Rosse (The Red Brigades), which aimed to bring about an Italian socialist state via armed revolution, ambushed two vehicles escorting the former Prime Minister Aldo Moro.²⁹² Moro was targeted while he was on his way to conclude a power sharing agreement between the Democratic Christian Party and the Italian Communist Party.²⁹³ This agreement would unify the Italian government for the first time in decades. However, the Red Brigades viewed the compromise as a threat to a successful beginning to their armed socialist revolution.²⁹⁴

During the ambush, four of Moro's bodyguards were killed and a fifth one later died of his injuries.²⁹⁵ Moro was kidnapped and then held in an apartment in Rome for 55 days.²⁹⁶ During this time, his captors, led by Mario Moretti, the commander of the Rome Column of the Red Brigades, put him on trial in an attempt to have him reveal government wrongdoings. Although Moro revealed little, he was still found guilty and sentenced to death. However, despite the death sentence, the Red Brigades attempted to exchange Moro for the release of political prisoners.²⁹⁷ On May 9, after 55 days in captivity, the government continued to refuse to negotiate for Moro's life, and at that time Moretti decided to take Moro's life. His body was discovered later that day in the trunk of a car in Rome.²⁹⁸

The Red Brigades were born out of the European protest movements of the 1960s, growing in size and strength until the kidnapping and murder of Moro. The murder shocked the Italian public, causing the Red Brigades' support base to diminish until the organization finally ended in 1988.²⁹⁹

²⁹¹ Bertrand Crettez, "An Economic Analysis of the Aldo," April 2008. p. 21. Available at: <http://congres.afse.fr/docs/117907aldomoro150408.pdf>.

²⁹² Paul Smith, "The Italian Red Brigades (1969-1984): Political," 2008, p. 20. Available at: <http://jeffnorwitz.com/Documents/2%20The%20Italian%20Red%20Brigades.pdf>; Victor Sundquist, "Political Terrorism: An Historical Journal of Strategic Security," No. 3, 2010, p. 60. Available at: http://www.henley-putnam.edu/templates/hpu/downloadables/journal/JSS_Vol3No3_Fall2010.pdf; All-art.org, "Italy Since 1945." Available at: <http://www.all-art.org/Visual%20History/564.htm>.

²⁹³ Crettez, "An Economic Analysis of the Aldo," p. 21; Richard Drake, *The Aldo Moro Murder Case*, (Cambridge, MA: Harvard University Press, 1995), pp. 118-119.

²⁹⁴ Crettez, "An Economic Analysis of the Aldo," p. 23; Drake, *The Aldo Moro Murder Case*, pp. 118-119.

²⁹⁵ Crettez, "An Economic Analysis of the Aldo," April 2008. pp. 21-22.

²⁹⁶ Robert Katz, "The Man Who Killed Aldo Moro," April, 1994. Available at: http://www.theboot.it/aldo_moro_op-ed.htm; Crettez, "An Economic Analysis of the Aldo," April 2008. p. 22.

²⁹⁷ Crettez, "An Economic Analysis of the Aldo," April 2008. p. 23; Sundquist, "Political Terrorism: An Historical Journal of Strategic Security," pp. 3, 58; All-art.org, "Italy Since 1945."

²⁹⁸ Crettez, "An Economic Analysis of the Aldo," April 2008. p. 23

²⁹⁹ Crettez, "An Economic Analysis of the Aldo," p. 23; Alan O'Leary, "Dead Man Walking" *The Aldo Moro New Cinemas: Journal of Contemporary Film*, Vol. 6, Issue 1 (2008) p. 33; Smith, "The Italian Red Brigades (1969-1984): Political." p.

Command and Control Analysis: Assertive

Although the Red Brigades organization appeared to have had a hierarchical structure with the Strategic Directorate being at the top, followed by the Executive Committee, which managed the six different columns,³⁰⁰ evidence suggests that the commanders of the columns held high levels of autonomy and that in practice, the structure was highly cellular in order to prevent the capture of one branch from affecting the other branches.³⁰¹ Each column was assigned a particular agenda, with the targeting of the Italian government being given to the Rome Column. While it is unclear what kind of connection there was between the Rome Column and the central leadership of the Red Brigades, there is no evidence to suggest that the commander of the Rome Column, Mario Moretti, sought approval for the kidnapping and murder of Moro. Rather, evidence suggests that Moretti may have been the principle planner and had sole authority over the direction of the mission.³⁰² For example, not only did he interrogate Moro and preside over his trial, Moretti made every decision regarding Moro over the course of the 55 days he was in captivity.³⁰³ In fact, Moretti, undeterred by the discontent from some of his fellow Red Brigades members, executed Moro, believing that his death would spark the beginning of a socialist revolution.³⁰⁴ Thus, in practice, the command and control style can best be described as assertive.

20; Sundquist, "Political Terrorism: An Historical Journal of Strategic Security." p. 60; All-art.org, "Italy Since 1945."; Katz, "The Man Who Killed Aldo Moro."

³⁰⁰ Smith, "The Italian Red Brigades (1969-1984): Political." p. 18.

³⁰¹ Sundquist, "Political Terrorism: An Historical Journal of Strategic Security." p. 57; Drake, *The Aldo Moro Murder Case*. p. 126.

³⁰² Crettez, "An Economic Analysis of the Aldo." p. 23; Katz, "The Man Who Killed Aldo Moro."; Drake, *The Aldo Moro Murder Case*. p. 128.

³⁰³ Ibid.

³⁰⁴ Drake, *The Aldo Moro Murder Case*. p. 125.

G. Mumbai

VNSA Command and Control Group Profile

Lashkar-e-Taiba (LeT: Army of the Pure)

The Mumbai Attacks, 2008

Group Type: Nationalist/Separatist/Religious

Command and Control Type: Assertive

Overview

The Mumbai attacks began at 9:30pm on November 26, 2008 when 10 Lashkar-e-Taiba (LeT) militants arrived at Mumbai's coast from the Pakistani port city of Karachi.³⁰⁵ The attack on Mumbai lasted for 62 hours until the last of the attackers was killed by Indian commandos at the Taj Hotel at 8:00am on November 29, 2008.³⁰⁶ While the militants had predetermined targets, their ultimate goal was to kill as many people as possible, specifically targeting foreigners in the city.³⁰⁷ Additionally, the targets were chosen because they were accessible. Not only is South Mumbai easily accessible from the sea, but the security forces at the targeted sites would only be lightly armed, thereby enabling LeT to maximize the chaos inflicted on India's commercial and entertainment capital.

Once on shore, the ten men split into four action teams, three with two men each and one with four men.³⁰⁸ One two man team departed from the arrival point for Mumbai's main train station, Chhatrapati Shivaji Terminus (CST), where they randomly opened fire on commuters.³⁰⁹ This attack continued for 90 minutes until the arrival of well-armed police units forced the militants to leave the station.³¹⁰ The team then headed to the Cama and Albless hospital, where they continued their rampage.³¹¹ After escaping with a police car, these two militants continued towards the Trident-Oberoi Hotel.³¹² Then, having been forced to turn back, they hijacked another vehicle, before being subdued by the police.³¹³ Unlike the other targets in the attack, which sought to kill foreigners, this particular team seemed to focus on killing Indian citizens likely because this would ignite greater fear among the thousands of Indians who use the rail hub on a daily basis.

The second team traveled to Nariman House, a complex that was run by the Jewish Chabad Lubavitch movement.³¹⁴ Along the way to Nariman House, they also lobbed several grenades at a petrol pump and indiscriminately opened fire.³¹⁵ Once at Nariman House, the terrorists took 13 people hostage, five of whom

³⁰⁵ K. Alan Kronstadt, "Terrorist Attacks in Mumbai, India and Implications for US Interests." Congressional Research Service, December 2008. pp. 1-3. Available at: <http://www.fas.org/sgp/crs/terror/R40087.pdf>

³⁰⁶ Jeremy Binnie and Christian Le Miere, "In the Line of Fire: Could Mumbai Happen Again?" Jane's Intelligence Review, January 2009. Available at: http://www4.janes.com/subscribe/jir/doc_view.jsp?K2DocKey=/content1/janesdata/mags/jir/history/jir2009/jir10536.htm@current&Prod_Name=JIR&

³⁰⁷ Ashley Tellis et al, "The Lessons of Mumbai" RAND Corporation, January 2009. pp. 6-7. Available at: http://www.rand.org/pubs/occasional_papers/2009/RAND_OP249.pdf

³⁰⁸ Binnie "In the Line of Fire: Could Mumbai Happen Again?"

³⁰⁹ Ibid.

³¹⁰ Kronstadt, "Terrorist Attacks in Mumbai, India and Implications for US Interests." pp. 1-3.

³¹¹ Tellis et al. "Lessons of Mumbai" pp. 5-6.

³¹² Ibid, pp.5-6.

³¹³ Ibid.

³¹⁴ Ibid, pp.5-6.

³¹⁵ Ibid, pp. 5-6.

they executed.³¹⁶ The last two-man team headed to the Trident-Oberoi Hotel, where they also fired indiscriminately. By the time the two militants at the Oberoi Hotel were killed, 17 hours after their initial shots, they had killed 30 people.³¹⁷

The last team, which was composed of four men, began its rampage by opening fire in the Leopold Café, a popular hangout for both the city's elite and foreigners alike.³¹⁸ Next, the terrorists walked about 100 meters into a back entrance of the Taj Mahal Palace Hotel, a historical icon of Mumbai, and resumed their killing spree,³¹⁹ traveling through the hotel killing guests and setting multiple fires to further confuse the responding police. The Taj Hotel siege lasted for another 60 hours until commandos stormed the hotel, killing the remaining terrorists.³²⁰ At the conclusion of all of the hostilities, 166 people died including civilians, both Indians and foreigners, policemen and nine out of the ten perpetrators.³²¹

India has argued that LeT needed cooperation from Pakistan's intelligence agency, the Inter-Services Intelligence (ISI), to carry out the Mumbai attacks.³²² LeT was developed with the support of ISI officers as a proxy force to challenge Indian forces that control the Muslim majority territory of Kashmir. However, at the time of the Mumbai attacks, the exact nature of the relationship between the ISI and the LeT could not be confirmed.³²³

Command and Control Analysis: Assertive

Based on the organizational structure, operational procedures, and other characteristics, it is clear that LeT primarily relies on an assertive system to carry out attacks.

LeT is known to possess a rigid hierarchical organizational structure, with a focus around its central leadership, which includes Hafeez Mohammed Saeed.³²⁴ The group also has a charitable branch called, Jamaat-ud-Dawah, that is believed to be a front for the organization.³²⁵ LeT and its charitable front currently have multiple branches across Pakistan, which are thought to facilitate recruitment, fundraising, and delivery of social services.³²⁶ Furthermore, LeT has a military-like structure where a hierarchy of leadership exerts influence over a particular geographic area.³²⁷

This organizational structure was also demonstrated in the Mumbai attacks because the terrorists were known to have been in constant communication using satellite phones and blackberries with their leaders

³¹⁶ Ibid, p. 6.

³¹⁷ Ibid, p. 6.

³¹⁸ Ibid, p. 6.

³¹⁹ Ibid, p.6.

³²⁰ Ibid, p. 6.

³²¹ Ibid, p. 6.

³²² This command and Control analysis focuses on LeT and not that of the ISI. However, it is important to note that ISI involvement has been critical for LeT. The ISI has been known to provide funding for LeT and also provides protection for the organization and its leadership. For example, Hafiz Mohammed Saeed, LeT's leader, currently lives freely in Pakistan. At the same time, it is plausible that LeT carried out this operation on its own. It is well known for its high operational capability. LeT is a member of Usama bin Laden's International Islamic Front (IIF) for Jihad against the Crusaders and the Jewish people and as a result it is well connected financially and also in terms of resources such as safe houses. Tellis, "The Lessons of Mumbai," pp. 15-17. Charles Blair, "Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban." Federation of American Scientist, June 2011. p. 94. Available at: http://www.fas.org/pubs/docs/Terrorism_Analysis_Report_1-lowres.pdf

³²³ Tellis, "The Lessons of Mumbai," pp. 15-17.

³²⁴ Ashley J. Tellis, "The Menace That Is Lashkar-e-Taiba," Carnegie Endowment for International Peace: Policy Outlook (2012), p. 13. Available at: http://carnegieendowment.org/files/LeT_menace.pdf.

³²⁵ Ibid, p. 13.

³²⁶ Ibid, p. 13.

³²⁷ Ibid, p. 13.

back in Pakistan.³²⁸ Transcripts obtained by Indian investigators indicate that these leaders would urge the terrorists to continue the rampage, insisting that the honor of Islam was at stake. They also provided the terrorists with tactical guidance, some of which they obtained from following live news media.³²⁹ Because of the frequent communication and continued guidance from individuals in Pakistan, it is clear that the Mumbai attack was not entirely preplanned.

³²⁸ Ibid, p. 13.

³²⁹ Tellis, "The Lessons of Mumbai," pp. 7-8.

H. Pakistan Army's GHQ

VNSA Command and Control Group Profile

**Tehrik-e-Taliban Pakistan (TTP: Movement of the Pakistani Taliban)
Assault on Pakistan Army's General Headquarters (GHQ), 2009**

Group Type: Islamist

Command and Control Type: Delegative

Overview

The assault on the Pakistani Army's General Headquarters (GHQ) in Rawalpindi began on October 10, 2009 and continued until October 11, 2009.³³⁰ Ten members of the Tehrik-e-Taliban (Students' Movement of Pakistan or Pakistani Taliban) [hereafter TTP], disguised as soldiers, managed to infiltrate Army GHQ, also known as "Pakistan's Pentagon," taking 42 hostages.³³¹ The objective was to hold senior Army officers as bargaining chip to coerce the government into releasing 115 detainees held by the Pakistani military.³³² They also hoped to deter the Pakistani military from increasing its operations against the TTP in South Waziristan.³³³ The ten TTP terrorists were led by Mohammed Aqeel, also known as "Dr. Usman".³³⁴ Aqeel was suspected of being involved in the Marriott hotel bombing in September 2008 and the assault on the Sri Lankan cricket team in March 2009. After eight hours, Pakistani military personnel were able to retake Army GHQ and successfully capture Aqeel. At the conclusion of the fighting, three hostages, 19 Pakistani soldiers and nine perpetrators died.³³⁵

Following the death of former leader, Batimullah Mehsud, after he was killed by an American Drone strike in 2009, the new leader of the TTP, Hakimullah Mehsud, announced that the Pakistani military was now their primary target. Additionally, prior to the Army GHQ attack, the Pakistani government threatened to launch an operation against the TTP in its stronghold of South Waziristan. At 11:30am on October 10, 2009, Mohammed Aqeel and nine other TTP terrorists disguised as soldiers pulled up to the main gate in a van and began shooting at Pakistani military personnel with AK-47 assault rifles and rocket-propelled grenades (RPGs).³³⁶ In the opening 45 minute gun battle, five TTP terrorists and six Pakistani military personnel were killed, including a brigadier general and a lieutenant colonel.³³⁷

³³⁰ Bill Roggio, "Pakistani commandos break siege on Army headquarters," Long War Journal, October 10, 2009.

Available at: http://www.longwarjournal.org/archives/2009/10/pakistani_commandos.php

³³¹ Charles P. Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban*, Federation of American Scientists, Terrorism Analysis Report No. 1, June 2011, p. 145.

³³² Malik Asad, "Attack on GHQ: confessions of a terrorist mastermind," *The Dawn*, September 21, 2011. Available at: <http://dawn.com/2011/09/21/attack-on-ghq-confessions-of-a-terrorist-mastermind/>; BBC, "Pakistan army raid frees hostages," BBC. Available at: http://news.bbc.co.uk/2/hi/south_asia/8301175.stm

³³³ Roggio, "Pakistani commandos break siege on Army headquarters."

³³⁴ Asad, "Attack on GHQ: confessions of a terrorist mastermind"; Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban*,

³³⁵ Asad, "Attack on GHQ: confessions of a terrorist mastermind"; Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban*; Roggio, "Pakistani commandos break siege on Army headquarters."

³³⁶ Jane Perlez, "Pakistan Retakes Army Headquarters; Hostages Freed," *The New York Times*, October 10, 2009. Available at: <http://www.nytimes.com/2009/10/11/world/asia/11pstan.html>; Roggio, "Pakistani commandos break siege on Army headquarters"; Bill Roggio, "Terrorists assault Pakistani Army General Headquarters in Rawalpindi." Long War Journal, October 10, 2009. Available at: http://www.longwarjournal.org/archives/2009/10/terrorists_assault_p.php

³³⁷ Asad, "Attack on GHQ: confessions of a terrorist mastermind"; Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban*; Roggio, "Pakistani commandos break siege on Army headquarters."

After the gunfight at the main gate, the remaining TTP terrorists fled inside the headquarters and took 42 hostages, causing the military operations and planning inside GHQ to come to a complete stop. However, at 6:30am on October 11, commandos from the Pakistani Army's Special Services Group (SSG) stormed the building where the remaining TTP terrorists were holding their hostages.³³⁸ Although two Pakistani soldiers died during the mission, the SSG rescue attempt was successful with 39 out of the 42 hostages being rescued. Out of the remaining five TTP terrorists, at least one was wearing a suicide vest.³³⁹ During the rescue, all of the TTP terrorists excluding Mohammed Aqeel, who was captured alive, were killed.

Command and Control Analysis: Delegative

TTP's command and control during the assault on the Army GHQ was delegative in nature. A delegative command and control structure is marked by top leadership empowering subordinates to make key decisions as necessary to ensure the success of an operation. The strongest evidence suggesting a delegative command and control is that Mohammed Aqeel was left to plan the details of the assault and that he did not contact leadership during the seizure of Army GHQ.³⁴⁰ While Ustad Aslam Yasin and Ilyas Kashmiri, commanders of TTP's Amjad Farooqui Group, came up with the idea to attack Army GHQ and take senior Pakistani Army officers hostage, Aqeel headed the logistics for the operation such as the coordination of the weapons, transport, and uniforms used in the assault.³⁴¹ Aqeel spent months doing reconnaissance of Army GHQ³⁴² and when the day for the assault arrived, Aqeel rescheduled the attack because his fighters were sick, further demonstrating his autonomy with regards to the operation.³⁴³ Additionally, as evidence that subordinates were given the ability to make key decisions, Mohammed Aqeel, although an experienced TTP operative, was not one of the TTP's senior commanders, yet he was still entrusted to carry out the attack.³⁴⁴

³³⁸ Roggio, "Pakistani commandos break siege on Army headquarters."

³³⁹ BBC, "Pakistan army raid frees hostages."

³⁴⁰ Asad, "Attack on GHQ: confessions of a terrorist mastermind"

³⁴¹ Ibid.

³⁴² Ibid.

³⁴³ Ibid.

³⁴⁴ Although he wasn't strategically experienced, Mohammed Aqeel was a very tactically experienced fighter. Aqeel is known to have coordinated or commanded many of the TTP's high-profile attacks, including the bombing of the Islamabad Marriott in September 2008; the attack on the Sri Lankan cricket team in March 2009; and the suicide attack that killed Lieutenant General Muhtaq Ahmed Baig, the Pakistani Army's Surgeon General. See: Bill Roggio, "Rawalpindi attack mastermind previously arrested and released," Long War Journal, October 12, 2009. Available at: http://www.longwarjournal.org/archives/2009/10/rawalpindi_attack_ma.php#ixzz0TqBE87H2

V. Conclusion

One striking element of this literature review is the similarity of challenges that all organizations face with “extension of authority over distance.” Indeed, the literature demonstrates that command and control can be dissected into the analyses of the flexibility or stability of the organization’s distribution of power structures, perception of loyalty of their members, and the stability of their environment, internal or external. The concepts and practices of nuclear command and control reflect the demand for dominion and delegation, which are the main concepts of organizational studies in analyzing the extension and balance of authority and delegation in terms of intentions, communication and outcomes.

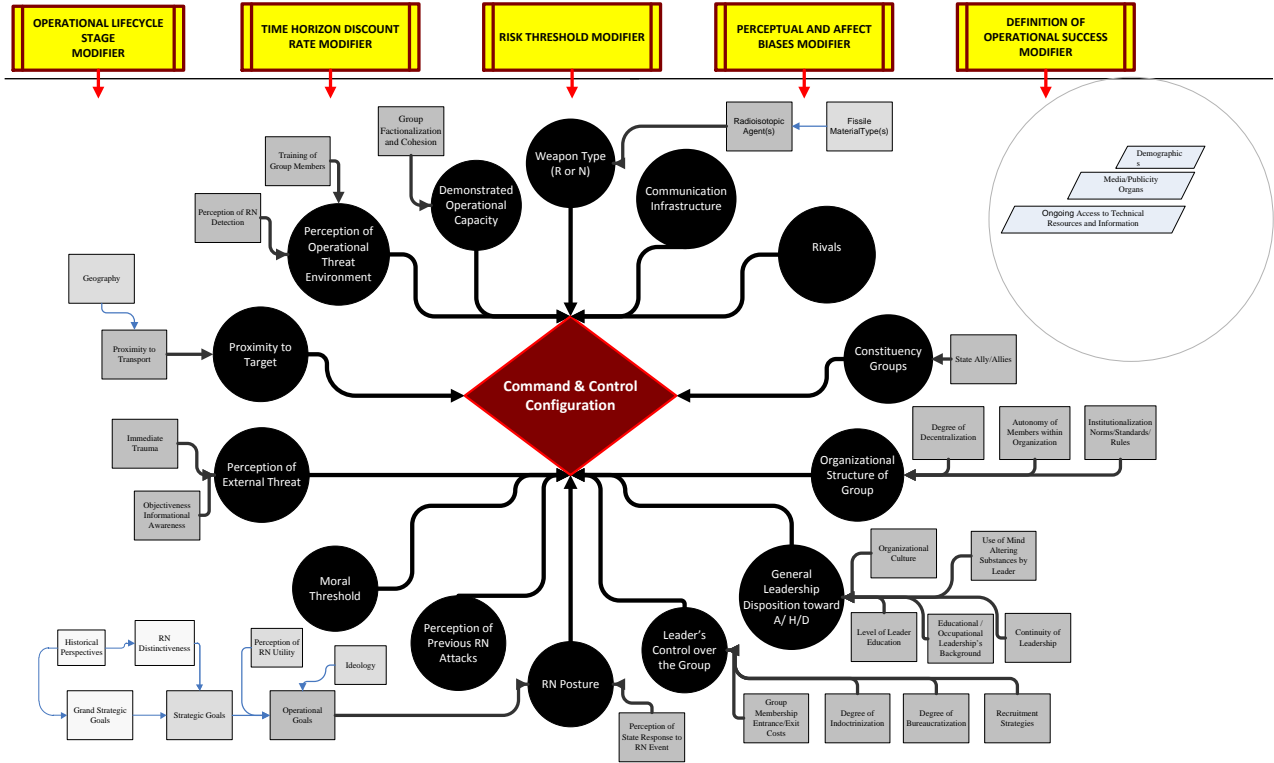
From a functionalist perspective, both state actors and VNSAs, which have separate components, act as a whole organism against external threats. Hence, the knowledge of their core culture can enlighten the group’s development of hierarchy, delegation of authority, and potential organizational reaction to crises. Although open source materials on state nuclear command and control are scarce and VNSAs lack their own nuclear weapons, behavior-informed models of national and organizational culture can shed light on the power distance between leaders and their operatives, as well as the level of uncertainty avoidance for both groups. In short, the literature reveals that the study of organizations—when viewed through the lenses of culture, social psychology, structure and control—reveals the universal and often inexorable dilemmas inherent in command and control.

State nuclear command and control systems center on maintaining political control over the use of nuclear forces. States are generally strongly restricted to the principle of no explosion without authorization, but the nature of this authorization may depend on the command and control system being pre-determined, assertive, or delegative. Planning mechanisms can be highly centralized or led by professional bureaucracy and the mechanisms for decision coordination – and constraints to internal information flows and resources – are crucial factors for understanding states’ nuclear programs. In this sense; strategic culture, stability of civil-military relations, and the influence of military officers all impact the nature of nuclear command and control configurations.

The terrorist events that have been evaluated point to the conclusion that groups with strict hierarchy and adherence to orders from hardline leadership tend to have either pre-determined or assertive command and control, and are unlikely to have a delegative system. In rigidly-hierarchical groups, a unified leadership compartmentalizes the specific agenda for each subgroup such as columns and cells, while maintaining direct control over major decisions and actions. In contrast delegative configurations dominate when leadership perceives omnipresent and existential threats.

Overall, the literature on general organizational, state nuclear, and VNSA conventional command and control suggests a multitude of potentially relevant variables that might influence a VNSA’s nuclear command and control. These are synthesized and summarized below in a preliminary model that has been derived from the above literature review (see Figure 11, also available here [\[PDF\]](#)).

Figure 11: Literature Derived Model of RN Command and Control



Expert Elicitation

Introduction

This section describes the process and results of an expert elicitation that evaluated how different violent non-state actors (VNSAs) will likely approach and actualize the command, control and use of radiological or nuclear (RN) weapons. This is a topic for which there is little to no direct empirical evidence, making traditional quantitative analysis inappropriate. In the previous sections, the project team therefore characterized and synthesized relevant data and theories from a wide range of related literatures, including:

- State command and control (C2) of nuclear weapons,
- General organizational decision making, and
- VNSA C2 of other types of weapon.

Using these related topic areas as inspiration, the result was the development of a preliminary framework describing the likely elements that will influence and determine VNSAs' RN command and control structures.

In the absence of an empirical record, the use of traditional methods to validate this framework is impossible. Moreover, the literature presents a static, and perhaps occasionally even outdated, view of what are undoubtedly highly dynamic actors and environments. In circumstances characterized by high levels of uncertainty and change, where there is an absence of sufficient empirical data, one well-recognized technique for validating and supplementing a theoretical framework is to leverage the pooled knowledge and creativity of a number of experts. Thus, the project team conducted a structured elicitation of recognized subject matter experts (SMEs), controlling insofar as possible for the biases that attend any judgmental analysis.

The elicitation had as its primary goal: **to validate and, where necessary, supplement the previously developed framework for RN command and control formulated as part of the broader project.** It would accomplish this:

- *Implicitly*, by eliciting salient variables and the interactions between these variables, so that these could be compared with the influencing factors that emerged from the literature reviews.
- *Explicitly*, by creating one or more alternative frameworks and then evaluating these alternatives against the previously developed framework.

The elicitation was held between January 24th and 25th, 2011 in College Park, Maryland and involved a carefully selected group of eight experts and two informed-naïve control participants.³⁴⁵

Methodology

The elicitation structure and agenda were designed over a period of three months by Gary Ackerman,³⁴⁶ with support from Charles Blair and John Sawyer. The workshop was coordinated by John Sawyer and Daniel Murphy, with support from Jeffrey Toor and Lauren Pinson as rapporteurs.³⁴⁷

a) Selecting Participants

Expert elicitee selection is a crucial step in the elicitation process in order to provide a sufficient breadth and depth of expertise and to ensure the productivity of the group. Existing literature on elicitation recommends

³⁴⁵ Given scheduling conflicts, the composition of the group changed between the two days of the elicitation. One expert had to leave halfway through the second day, so a replacement was brought in for day two. Thus, there were nine participants on day one, ten in the morning of day two, and nine again in the afternoon of day two.

³⁴⁶ Ackerman has several years' worth of experience in conducting expert elicitations of this type.

³⁴⁷ The organizers would also like to thank Hannah LeForge and Jerome Linkins for their participation as actors in the kick-off scenario.

– within the context of required expertise – that participants be as heterogeneous as possible in terms of academic discipline, public and private service, background and types of experience.³⁴⁸ The project team therefore first developed a list of “slots” of required types of expertise in order to sufficiently cover the topic domain. It then conducted extensive research on potential participants from a variety of disciplines and backgrounds, discussed which were likely to contribute the most to the elicitation in terms of expertise and personality, and developed a shortlist of invitees. Invitations were sent out to elicittees until all the required slots were filled. In addition to eight experts, two naïve participants³⁴⁹ were invited, in order to provide a baseline against which the contributions of the experts could be calibrated.

The final roster of elicittees consisted of (in alphabetical order):

- Charles Faddis
- Peter Feaver
- Charles Ferguson
- Renee Hood
- Frank Hopper
- Brian Jackson
- Paul Muchinsky
- Peter Neumann
- Michael Tierney
- Jim Wirtz

Academic and professional backgrounds of the group included: a nuclear physicist; a former CIA operations officer; four political scientists; a chemist; an organizational psychologist; a lawyer; and a computer programmer.

Relevant expertise covered included: radiological / nuclear weapons technical expertise; state nuclear weapons deployment policies; general organizational decision making; principal-agent interactions; terrorist operational decision making; and extant terrorist organizations.

b) Developing the Elicitation Script

The research team considered a number of elicitation techniques as mechanisms for achieving the goals described above. Once the most appropriate techniques had been selected and customized implementations designed to fit the needs of the topic, a formal elicitation script was developed in order to provide a structured framework for the workshop, and optimize the use of the available time with the experts (see Appendix 2 for the complete script).

The major components of the elicitation included:

- **Motivating Participants:** Use of a live performance scenario and implicit and explicit cues in order to: introduce participants to the nuances of the topic; arouse normative interest among participants in the elicitation process; embed the importance of the elicitation in participant’s mental frames and build a strong goal-driven work ethic for the meeting.
- **Participant Cognitive Structuring:** In an attempt to ensure optimal fidelity of judgmental data, the elicitation utilized a series of debiasing techniques, consisting of presentations and exercises to call the attention of elicittees to inherent biases in any expert elicitation process, such as anchoring,

³⁴⁸ Gene Rowe and George Wright. “Expert Opinions in Forecasting: The Role of the Delphi Technique.” In *Principles of Forecasting: A Handbook for Researchers and Practitioners*, edited by J. Scott Armstrong, p. 126. Boston, MA: Kluwer Academic, 2001.

³⁴⁹ The criteria for a naïve participant included: post-secondary education; demonstrated creativity and problem-solving capabilities and no prior expertise in any aspect of the topic under discussion.

probability neglect and various fallacies. This component also involved subject matter expert self-reports regarding their expertise and existing prejudices, to be used in post-elicitation analysis for weighting, etc.

- **Semi-Structured Brainstorming Exercises:** Used to rapidly produce a large volume of ideas, this family of techniques involves a facilitator-led creative generation of ideas without immediate judgment of elicitee suggestions, in order to identify potential factors (variables) that might influence non-state actor RN command and control structures. In addition to standard “vanilla” brainstorming, the elicitation employed two other variants – rapid-fire and reverse brainstorming – in order to disrupt existing cognitive patterns and elicit novel ideas. The initial brainstorming was then followed by a collaborative process in which redundancies were removed and the remaining ideas clustered and categorized (in the form of a proto-ontology). Thereafter, using the SurveyMonkey online tool, experts ranked the resultant list of variables according to three organizational contexts for nuclear weapons use: al-Qa`ida, right-wing extremists and generic terrorist opponents. Finally, the variables were re-ranked in the context of radiological weapons.
- **Red-Team Scenarios:** In order to access alternative, context-rich judgments, elicitees were separated into three working groups of three people each and supplied with detailed descriptions of fictional violent non-state actor groups. They were instructed to devise – in role – RN attack plans using these VNSA descriptions, with an emphasis on the formulation and conduct of command and control structures. In this way, it was possible to link causal chains of behavior that could implicitly yield information into elicitee beliefs regarding factors affecting C2 and the relationships between factors. With the aim of varying context, three scenarios were provided to participants, the first a basic nuclear attack, the second reflecting a windfall in resources and the third a radiological attack.
- **Future Backwards Exercise:** For this technique, attack scenarios were constructed individually in a stepwise fashion, from a future vantage point and in reverse, in order to maximize heuristic disruption for the experts. This was the last technique employed to elicit new influencing factors and relationships between factors.
- **Model Development:** Separated into teams of three participants each (with a mix of expertise within each group), participants were provided with their previously-ranked listings of salient variables and tasked with using these to develop a simple model of the dynamics of VNSA command and control with respect to nuclear weapons. This was followed by presentation of these models to the group and discussion. Participants were then presented with the framework previously developed by START. Last, participants were requested to make any modifications that they thought were necessary in order to adapt the model to the context of radiological weapons.
- **Implicit Model Evaluation:** Participants were presented with the three models they had produced, together with the START model. With the objective of determining revealed preferences across the models, the elicitees were each given a fixed, equal supply of “currency” with which to “bet” on the model they believed was most likely to be the best reflection of reality. This was followed by discussion and critique of the various models.
- **Synthesis:** After revealing the results of the preliminary model evaluation, the facilitator guided the participants as a group to extract what they believed to be the strongest elements from the four models and to synthesize these model elements to form an improved model.
- **Pseudo-Experiment:** Taking a Team A / Team B approach, participants were divided into two teams, with one naïve participant and one terrorism expert on each. Each team was tasked with determining, to the best of its members’ ability, the likely command and control structures of two existing VNSAs, in the event that they were to acquire nuclear weapons. For the first VNSA (Hizballah), Team A was instructed to directly apply the synthesized model to determine C2

structures, while Team B was explicitly instructed to ignore the model and take a purely narrative analytical approach. For the second VNSA (Aum Shinrikyo), the instructions for each team were reversed. Finally, each team presented and discussed their respective results with the larger group.

- **Roundtable Discussion:** Participants were encouraged to provide additional details for consideration, as well as overarching comments on the models and variables developed.

c) *Post-Elicitation Analysis*

Following the elicitation workshop, project researchers compiled all the notes and data generated during the elicitation, in addition to a follow-up ranking requested from participants. A combination of qualitative and quantitative analysis was performed on this data and the results are presented below.

Results

Brainstorming Variables

In a series of brainstorming activities, including structured, rapid fire, and reverse techniques, the elicitation participants identified 65 discrete variables. Subsequently, similar variables were linked into eight clusters: 1. External Threat Environment, 2. Ideology and Goals, 3. Weapons, 4. Doctrine, 5. Time, 6. Unconscious, 7. Leadership, 8. Group Dynamics and 9. Culture.

External Threat Environment

- Retaliation risk
 - Assumptions about response to weapon use
 - Viable retaliation targets (counter-value, counter-force)
- Assessment of external threat
- Assessment of vulnerability
- Objective external threat vs vulnerability
- Competition
- State sponsorship
- Enemy knowledge of weapon possession
- Terrorist use of nuclear weapon (hypothetical for forecasting)
- Effects on financial backing (funder influence)
- Safe haven

Ideology and Goals

- Ideology
- Political goals
- Dynamism of goals (adaptability to environmental changes)
- Goal: terror or destruction
- Definition of success (content and flexibility)
- Risk thresholds and preferences for types of risk
 - Preference detection vs. detonation
 - Preference for fail impotent vs. fail deadly
- Desire for attribution
- Links to constituency
- Best available use of the weapon
- Perception of religious justification for weapon use

Weapon

- Number of non-nuclear weapons possessed
- Number of nuclear weapons possessed
- Physical size of weapon
- Confidence in nuclear material quality
- Confidence in weaponization/delivery mechanism quality
- Acquisition type: production vs. gift
- Access to target
- Salvageability of weapon (in case of failed detonation)
- Nature of the weapon
- Acquisition economy of scale
- Recallability of weapon

Doctrine

- Withdrawal of justification
- Lawyer problem (culture/codes of conduct vs. commands)
- Previous command and control (perception of success)
- Contingency plan
- Awareness of command and control literature

Time

- Sense of urgency

Unconscious

- Shock of acquisition
- Technofetish/Mesmerization
- Euphoria of being first actor

Leadership

- Leadership-level proclivity toward risk
- Leadership resilience
- Self-importance or self-preservation of leadership
- Personality
- Weapon as token of leadership
- Individual-level experience
- Leadership-level technical sophistication
- Membership-level technical sophistication
- Reliability and security within organization (delegability)
- Reliability of personnel (delegability)
- Military background of leadership
- Specialist training and knowledge

Group Dynamics

- Funding capacity
- Dedication to follow-through
- Internal power struggles
- Adaptability and resourcefulness
- Homogeneity
- Reliability and security of communications
- Geographic proximity of members
- Internal structures/levels of trust

Culture

- Culture of the country of origin

Variable Rankings

Out of the 65 variables identified as important during the brainstorming session, the elicitation participants ranked their top 15 for each of the models (Al Qaida, Right Wing, General Nuclear, and General Radiological) during and one week after the elicitation.³⁵⁰ Their selections were tallied to provide an overall score and variables were ranked on this group score.

Table 3: Expert Rankings during Elicitation

<i>Al Qaida</i>			<i>Right Wing</i>			<i>General Nuclear</i>			<i>General Radiological</i>		
Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank
definition of success	45	(1)	assessment of external threat	85	1	assessment of external threat	71	1	political goals	55	1
assessment of vulnerabilities	43	2	<i>enemy's knowledge that they possess weapon</i>	55	2	definition of success	55	2	assumptions about response to weapon use	53	2
risk thresholds and preferences for types of risk	41	3	definition of success	54	3	internal structures/ level of trust	52	3	assessment of external threat	50	3
confidence in weaponization/ delivery	41	3	political goals	51	4	assessment of vulnerabilities	40	4	definition of success	49	4
reliability and security within org	41	3	assumptions about response to weapon use	46	5	reliability and security within org	40	4	internal structures/ level of trust	46	5
internal structures/ level of trust	41	3	internal structures/ level of trust	38	6	political goals	37	6	previous C&C (and perception of them)	45	6
assessment of external threat	38	7	<i>reliability and security of communications</i>	36	7	assumptions about response to weapon use	35	7	<i>reliability and security of communications</i>	44	7
<i>enemy's knowledge that they possess weapon</i>	38	7	assessment of vulnerabilities	35	8	previous C&C (and perception of them)	34	8	reliability and security within org	40	8
assumptions about response to weapon use	38	7	sense of urgency	35	8	<i>reliability and security of communications</i>	34	8	ability to get to target	38	9
reliability of personnel	35	10	ideology	34	10	<i>enemy's knowledge that they possess weapon</i>	33	10	goal is terror or destruction	35	10
trade-off between failing impotent and failing deadly	33	11	retaliation	32	11	links to constituency	33	10	<i>enemy's knowledge that they possess weapon</i>	33	11
<i>reliability and security of</i>	31	12	trade-off between risk of detection and	31	12	confidence in weaponization/	33	10	proclivity toward risk	32	12

³⁵⁰ Two of the subject matter experts did not take part in the post-elicitation ranking exercise.

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<i>communications</i>			risk of detonation			delivery					
ability to get to target	30	13	power struggles in the organization	29	13	link to state sponsors	32	13	adaptability & resourcefulness	32	12
best use of the weapon	29	14	viable retaliation targets	28	14	financial backing (consequences)	32	13	experience of leadership	31	14
Euphoria (from being the first)	28	15	trade-off between failing impotent and failing deadly	28	14	Ideology	32	13	link to state sponsors	30	15
proclivity toward risk	28	15	confidence in weaponization/delivery	28	14	perception of religious justification for use	32	13	financial backing (consequences)	30	15
perception of religious justification for use	26	17	personalities	28	14	goal is terror or destruction	31	17	risk thresholds and preferences for types of risk	29	17
previous C&C (and perception of them)	26	17	training & knowledge of specialists	28	14	power struggles in the organization	31	17	personalities	28	18
sense of urgency	26	17	goal is terror or destruction	27	19	risk thresholds and preferences for types of risk	29	19	ideology	27	19
safe haven	25	20	ability to get to target	26	20	best use of the weapon	29	19	training & knowledge of specialists	27	19
ideology	24	21	safe haven	25	21	ability to get to target	25	21	safe haven	26	21
leadership resilience	23	22	reliability and security within org	25	21	Retaliation	24	22	retaliation	25	22
trade-off between risk of detection and risk of detonation	22	23	leadership resilience	24	23	Euphoria (from being the first)	22	23	confidence in weaponization/delivery	24	23
wanting to take credit	21	24	dedication to follow-through	24	23	trade-off between risk of detection and risk of detonation	21	24	trade-off between failing impotent and failing deadly	22	24
training & knowledge of specialists	21	24	risk thresholds and preferences for types of risk	22	25	training & knowledge of specialists	20	25	trade-off between risk of detection and risk of detonation	20	25
homogeneity of group	21	24	previous C&C (and perception of them)	22	25	safe haven	19	26	confidence in nuclear materials	20	25
adaptability & resourcefulness	20	27	reliability of personnel	20	27	confidence in nuclear materials	19	26	sense of urgency	20	25
goal is terror or destruction	19	28	links to constituency	19	28	reliability of personnel	19	26	reliability of personnel	18	28
path of acquisition	19	28	technical sophistication of leadership	18	29	viable retaliation targets	17	29	leadership resilience	17	29
weapon is indicator of leadership	19	28	funding capacity	17	30	dedication to follow-through	17	29	power struggles in the organization	17	29

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funding capacity	18	31	awareness of literature	16	31	sense of urgency	16	31	assessment of vulnerabilities	16	31
power struggles in the organization	18	31	confidence in nuclear materials	15	32	Personalities	15	32	links to constituency	14	32
number of nuclear weapons	17	33	nature of weapon	15	32	experience of leadership	15	32	best use of the weapon	14	32
technical sophistication of leadership	17	33	size of weapons	14	34	number of competitors	14	34	path of acquisition	13	34
personalities	17	33	ease of getting 1st weapon	14	34	nature of weapon	14	34	nature of weapon	13	34
link to state sponsors	15	36	proclivity toward risk	14	34	existence of contingency plans	14	34	proximity of members to each other	13	34
political goals	15	36	recall-ability of weapon	13	37	changing goals/removing targets	13	37	ease of getting 1st weapon	12	37
salvage-ability of weapon	15	36	Euphoria (from being the first)	11	38	trade-off between failing impotent and failing deadly	13	37	existence of contingency plans	12	37
ease of getting 1st weapon	15	36	technical sophistication of foot soldiers	11	38	number of weapons	13	37	Euphoria (from being the first)	12	37
recall-ability of weapon	15	36	financial backing (consequences)	9	40	size of weapons	13	37	technical sophistication of foot soldiers	11	40
awareness of literature	15	36	adaptability & resourcefulness	9	40	leadership resilience	13	37	dedication to follow-through	11	40
withdrawal of justification	14	42	wanting to take credit	8	42	path of acquisition	12	42	technical sophistication of leadership	10	42
viable retaliation targets	12	43	weapon is indicator of leadership	8	42	wanting to take credit	11	43	homogeneity of group	10	42
links to constituency	11	44	external threat	7	44	recall-ability of weapon	9	44	perception of religious justification for use	8	44
size of weapons	11	44	number of competitors	7	44	technical sophistication of foot soldiers	9	44	external threat	7	45
military or civilian background	11	44	link to state sponsors	7	44	adaptability & resourcefulness	8	46	number of competitors	7	45
proximity of members to each other	11	44	whether there has been a nuke use in interval	7	44	homogeneity of group	8	46	whether there has been a nuke use in interval	7	45
nature of weapon	10	48	changing goals/removing targets	7	44	external threat	7	48	viable retaliation targets	7	45
experience of leadership	10	48	best use of the weapon	7	44	whether there has been a nuke use in interval	7	48	wanting to take credit	7	45
technical sophistication of foot soldiers	10	48	perception of religious justification for use	7	44	number of nuclear weapons	7	48	changing goals/removing targets	7	45

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retaliation	9	51	number of weapons	7	44	salvage-ability of weapon	7	48	number of weapons	7	45
existence of contingency plans	9	51	number of nuclear weapons	7	44	ease of getting 1st weapon	7	48	number of nuclear weapons	7	45
external threat	7	53	path of acquisition	7	44	withdrawal of justification	7	48	size of weapons	7	45
number of competitors	7	53	salvage-ability of weapon	7	44	lawyer problem	7	48	salvage-ability of weapon	7	45
whether there has been a nuke use in interval	7	53	withdrawal of justification	7	44	awareness of literature	7	48	recall-ability of weapon	7	45
financial backing (consequences)	7	53	lawyer problem	7	44	length of shock from acquisition	7	48	withdrawal of justification	7	45
changing goals/removing targets	7	53	existence of contingency plans	7	44	culture of the country of origin	7	48	lawyer problem	7	45
number of weapons	7	53	length of shock from acquisition	7	44	mesmerization by technology	7	48	awareness of literature	7	45
confidence in nuclear materials	7	53	culture of the country of origin	7	44	proclivity toward risk	7	48	length of shock from acquisition	7	45
lawyer problem	7	53	mesmerization by technology	7	44	technical sophistication of leadership	7	48	culture of the country of origin	7	45
length of shock from acquisition	7	53	self-importance	7	44	self-importance	7	48	mesmerization by technology	7	45
culture of the country of origin	7	53	experience of leadership	7	44	weapon is indicator of leadership	7	48	self-importance	7	45
mesmerization by technology	7	53	military or civilian background	7	44	military or civilian background	7	48	weapon is indicator of leadership	7	45
self-importance	7	53	homogeneity of group	7	44	funding capacity	7	48	military or civilian background	7	45
dedication to follow-through	7	53	proximity of members to each other	7	44	proximity of members to each other	7	48	funding capacity	7	45

Bold denotes variables consistently in the top 10 across all four models.

Italics denote variables consistently in the top 15 across all models.

~~Strike-through~~ denotes variables consistently receiving no high rankings in any of the four models.

Table 4: Expert Ranking after Elicitation

<i>Al Qaida</i>			<i>Right Wing</i>			<i>General Nuclear</i>			<i>General Radiological</i>		
Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank
reliability and security of communications	57	1	assessment of external threat	52	1	assessment of external threat	53	1	assessment of external threat	44	1
reliability of personnel	51	2	political goals	50	2	internal structures/level of trust	37	2	political goals	39	2
internal structures/level of	47	3	internal structures/level of	45	3	reliability and security of	35	3	internal structures/level of	38	3

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trust			trust			communications			trust		
ability to get to target	40	4	<i>assessment of vulnerabilities</i>	39	4	enemy's knowledge that they possess weapon	34	4	<i>previous C&C (and perception of them)</i>	34	4
assessment of external threat	39	5	definition of success	35	5	Ideology	34	4	reliability and security within org	34	4
safe haven	39	5	reliability of personnel	34	6	link to state sponsors	33	6	reliability and security of communications	34	4
confidence in weaponization/delivery	37	7	links to constituency	29	7	reliability and security within org	33	6	goal is terror or destruction	33	7
reliability and security within org	33	8	<i>risk thresholds and preferences for types of risk</i>	28	8	<i>assessment of vulnerabilities</i>	30	8	reliability of personnel	31	8
perception of religious justification for use	32	9	homogeneity of group	25	9	<i>risk thresholds and preferences for types of risk</i>	30	8	link to state sponsors	30	9
<i>risk thresholds and preferences for types of risk</i>	30	10	proclivity toward risk	24	10	reliability of personnel	27	10	<i>assessment of vulnerabilities</i>	30	9
training & knowledge of specialists	28	11	trade-off between failing impotent and failing deadly	23	11	ability to get to target	25	11	<i>risk thresholds and preferences for types of risk</i>	29	11
<i>assessment of vulnerabilities</i>	26	12	confidence in weaponization/delivery	23	11	path of acquisition	24	12	assumptions about response to weapon use	28	12
enemy's knowledge that they possess weapon	26	12	<i>previous C&C (and perception of them)</i>	22	13	training & knowledge of specialists	23	13	ability to get to target	28	12
confidence in nuclear materials	22	14	path of acquisition	21	14	viable retaliation targets	22	14	trade-off between risk of detection and risk of detonation	25	14
<i>previous C&C (and perception of them)</i>	22	14	training & knowledge of specialists	21	15	goal is terror or destruction	22	14	definition of success	24	15
link to state sponsors	18	16	enemy's knowledge that they possess weapon	19	16	confidence in weaponization/delivery	22	14	ideology	22	16
trade-off between failing impotent and failing deadly	18	16	goal is terror or destruction	19	16	<i>previous C&C (and perception of them)</i>	22	14	retaliation	20	17
funding capacity	17	18	reliability and security of communications	19	16	Retaliation	20	18	external threat	20	17
number of weapons	15	19	reliability and security within org	18	19	safe haven	20	18	enemy's knowledge that they possess weapon	20	17
trade-off between risk of detection and risk of detonation	14	20	retaliation	17	20	trade-off between risk of detection and risk of detonation	19	20	path of acquisition	18	20
best use of the weapon	12	21	link to state sponsors	17	20	external threat	18	21	training & knowledge of specialists	18	20
goal is terror or destruction	12	21	funding capacity	17	20	number of weapons	18	21	funding capacity	17	22
leadership resilience	12	21	dedication to follow-through	17	20	funding capacity	17	23	financial backing (consequences)	16	23
external threat	11	24	external threat	15	24	financial backing (consequences)	16	24	technical sophistication of foot soldiers	15	24
viable retaliation targets	11	25	ability to get to target	15	24	assumptions about response to weapon use	13	25	proclivity toward risk	14	25

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number of nuclear weapons	11	26	sense of urgency	15	24	perception of religious justification for use	13	25	perception of religious justification for use	13	26
ideology	10	27	leadership resilience	15	24	trade-off between failing impotent and failing deadly	12	27	homogeneity of group	13	26
recall-ability of weapon	10	27	proximity of members to each other	15	24	dedication to follow-through	12	27	adaptability & resourcefulness	12	28
nature of weapon	9	29	ideology	14	29	definition of success	11	29	viable retaliation targets	11	29
existence of contingency plans	9	29	changing goals/removing targets	14	29	links to constituency	10	30	safe haven	11	29
technical sophistication of foot soldiers	9	29	viable retaliation targets	13	31	power struggles in the organization	10	30	links to constituency	11	29
homogeneity of group	9	29	financial backing (consequences)	12	32	political goals	9	32	confidence in nuclear materials	11	29
sense of urgency	8	33	power struggles in the organization	12	32	leadership resilience	9	32	awareness of literature	11	29
financial backing (consequences)	7	34	confidence in nuclear materials	11	34	confidence in nuclear materials	8	34	dedication to follow-through	10	34
salvage-ability of weapon	7	34	number of competitors	10	35	recall-ability of weapon	7	35	best use of the weapon	9	35
definition of success	6	36	perception of religious justification for use	9	36	technical sophistication of foot soldiers	7	35	existence of contingency plans	9	35
adaptability & resourcefulness	6	36	Personalities	8	37	ease of getting 1st weapon	6	37	leadership resilience	8	37
retaliation	5	38	number of nuclear weapons	7	38	proclivity toward risk	6	37	confidence in weaponization/delivery	7	38
number of competitors	5	38	existence of contingency plans	7	38	adaptability & resourcefulness	6	37	number of competitors	5	39
whether there has been a nuke use in interval	5	38	Euphoria (from being the first)	7	38	number of competitors	5	40	whether there has been a nuke use in interval	5	39
assumptions about response to weapon use	5	38	safe haven	6	41	whether there has been a nuke use in interval	5	40	wanting to take credit	5	39
wanting to take credit	5	38	technical sophistication of foot soldiers	6	41	wanting to take credit	5	40	changing goals/removing targets	5	39
changing goals/removing targets	5	38	whether there has been a nuke use in interval	5	43	changing goals/removing targets	5	40	trade-off between failing impotent and failing deadly	5	39
links to constituency	5	38	assumptions about response to weapon use	5	43	best use of the weapon	5	40	number of weapons	5	39
political goals	5	38	wanting to take credit	5	43	number of nuclear weapons	5	40	number of nuclear weapons	5	39
size of weapons	5	38	best use of the weapon	5	43	size of weapons	5	40	size of weapons	5	39
path of acquisition	5	38	trade-off between risk of detection and risk of detonation	5	43	salvage-ability of weapon	5	40	salvage-ability of weapon	5	39
ease of getting 1st weapon	5	38	number of weapons	5	43	nature of weapon	5	40	nature of weapon	5	39
withdrawal of justification	5	38	size of weapons	5	43	withdrawal of justification	5	40	ease of getting 1st weapon	5	39
lawyer problem	5	38	salvage-ability of weapon	5	43	lawyer problem	5	40	recall-ability of weapon	5	39
awareness of literature	5	38	nature of weapon	5	43	existence of contingency plans	5	40	withdrawal of justification	5	39
length of shock	5	38	ease of getting 1st	5	43	awareness of	5	40	lawyer problem	5	39

from acquisition			weapon			literature					
culture of the	5	38	recall-ability of	5	43	sense of urgency	5	40	sense of urgency	5	39
country of origin			weapon			length of shock			length of shock		
mesmerization by	5	38	withdrawal of	5	43	from acquisition	5	40	from acquisition	5	39
technology			justification			culture of the			culture of the		
Euphoria (from	5	38	lawyer problem	5	43	country of origin	5	40	country of origin	5	39
being the first)			awareness of			mesmerization by			mesmerization by		
proclivity toward	5	38	literature	5	43	technology	5	40	technology	5	39
risk			length of shock			Euphoria (from			Euphoria (from		
technical	5	38	from acquisition	5	43	being the first)	5	40	being the first)	5	39
sophistication of			culture of the			technical			technical		
leadership	5	38	country of origin	5	43	sophistication of	5	40	sophistication of	5	39
self-importance	5	38	mesmerization by	5	43	leadership			leadership		
personalities	5	38	technology			self-importance	5	40	self-importance	5	39
weapon is indicator	5	38	technical			personalities	5	40	personalities	5	39
of leadership			sophistication of	5	43	weapon is indicator			weapon is indicator		
experience of	5	38	leadership			of leadership	5	40	of leadership	5	39
leadership			self-importance	5	43	experience of			experience of		
military or civilian	5	38	weapon is indicator	5	43	leadership	5	40	leadership	5	39
background			of leadership			military or civilian			military or civilian		
dedication to	5	38	experience of	5	43	background	5	40	background	5	39
follow-through			leadership			homogeneity of			power struggles in		
power struggles in	5	38	military or civilian	5	43	group	5	40	the organization	5	39
the organization			background			proximity of			proximity of		
proximity of	5	38	adaptability &	5	43	members to each	5	40	members to each	5	39
members to each			resourcefulness			other			other		
other	5	38									

Bold denotes variables consistently in the top 10 across all four models.

Italics denote variables consistently in the top 15 across all models.

~~Strike-through~~ denotes variables consistently receiving no high rankings in any of the four models.

The experts ranked 17 variables very highly across nearly all of the models during and after the elicitation and a further seven variables that were highly ranked across most of the models. These were identified by examining the top 15 variables identified in each model, then determining if they were highly ranked (within the top 30) in the other models. Those variables that were in the top 15 for at least six of the eight models were deemed strong. Those variables in the top 15 for four of them and within the top 30 for at least one of the remaining models were deemed to be consistently important. Some of these variables appear to capture closely bundled concepts within a VNSA's decision making calculus, e.g. assessment of external threat, assessment of vulnerability, risk thresholds, assumptions about reaction to weapons use, and viable retaliation targets or reliability and security of communications.

Strongly Identified

- Assessment of vulnerabilities
- Reliability and security of communications
- Reliability of personnel
- Internal structures/level of trust
- Ability to get to target
- Assessment of external threat
- Confidence in weaponization/delivery
- Reliability and security within organization
- Risk thresholds and preferences for types of risk
- Training and knowledge of specialists
- Enemy's knowledge that they possess weapon
- Previous command and control (and perception of success)
- Link to state sponsors

- Goal is terror or destruction
- Assumptions about response to weapon use
- Definition of success
- Political goals

Consistently Identified

- Perception of religious justification for use
- Trade-off between failing impotent and failing deadly (nuke only)
- Acquisition type
- Ideology
- Viable retaliation targets
- Trade-off between risk of detection and risk of detonation
- Financial backing (consequences)

Table 5: Overall Ranking during Elicitation

<i>Al Qaida</i>			<i>Right Wing</i>			<i>General Nuclear</i>			<i>General Radiological</i>		
Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank
definition of success	61	1	<i>assessment of external threat</i>	93	1	internal structures/level of trust	83	1	political goals	79	1
<i>previous C&C (and perception of them)</i>	57	2	political goals	80	2	<i>assessment of external threat</i>	82	2	internal structures/level of trust	70	2
reliability and security within org	54	3	definition of success	69	3	definition of success	65	3	definition of success	66	3
trade-off between failing impotent and failing deadly	48	4	<i>enemy's knowledge that they possess weapon</i>	57	4	political goals	64	4	<i>previous C&C (and perception of them)</i>	62	4
reliability of personnel	46	5	assumptions about response to weapon use	56	5	<i>previous C&C (and perception of them)</i>	55	5	reliability and security of communications	59	5
internal structures/level of trust	46	5	internal structures/level of trust	52	6	reliability and security within org	54	6	assumptions about response to weapon use	55	6
assessment of vulnerabilities	45	7	reliability and security of communications	49	7	reliability and security of communications	50	7	<i>assessment of external threat</i>	54	7
risk thresholds and preferences for types of risk	43	8	ideology	48	8	links to constituency	46	8	confidence in weaponization/delivery	47	8
confidence in weaponization/delivery	43	8	viable retaliation targets	45	9	assessment of vulnerabilities	44	9	ability to get to target	45	9
leadership resilience	43	8	confidence in weaponization/delivery	42	10	confidence in weaponization/delivery	43	10	reliability and security within org	42	10
<i>assessment of external threat</i>	40	11	retaliation	41	11	goal is terror or destruction	41	11	<i>enemy's knowledge that they possess weapon</i>	41	11
<i>enemy's knowledge that they possess weapon</i>	40	11	<i>previous C&C (and perception of them)</i>	38	12	risk thresholds and preferences for types of risk	39	12	goal is terror or destruction	41	11

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assumptions about response to weapon use	40	11	assessment of vulnerabilities	37	13	assumptions about response to weapon use	37	13	adaptability & resourcefulness	41	11
ability to get to target	40	11	sense of urgency	37	13	<i>enemy's knowledge that they possess weapon</i>	35	14	training & knowledge of specialists	39	14
trade-off between risk of detection and risk of detonation	36	15	trade-off between risk of detection and risk of detonation	33	15	link to state sponsors	34	15	trade-off between failing impotent and failing deadly	37	15
sense of urgency	35	16	technical sophistication of foot soldiers	33	15	financial backing (consequences)	34	15	proclivity toward risk	37	15
reliability and security of communications	35	16	dedication to follow-through	33	15	Ideology	34	15	trade-off between risk of detection and risk of detonation	34	17
perception of religious justification for use	34	18	power struggles in the organization	31	18	best use of the weapon	34	15	experience of leadership	33	18
weapon is indicator of leadership	32	19	trade-off between failing impotent and failing deadly	30	19	perception of religious justification for use	34	15	link to state sponsors	32	19
best use of the weapon	31	20	personalities	30	19	safe haven	33	20	financial backing (consequences)	32	19
adaptability & resourcefulness	31	20	training & knowledge of specialists	30	19	power struggles in the organization	33	20	risk thresholds and preferences for types of risk	31	21
Euphoria (from being the first)	30	22	homogeneity of group	30	19	reliability of personnel	32	22	personalities	30	22
proclivity toward risk	30	22	safe haven	29	23	trade-off between failing impotent and failing deadly	31	23	ideology	29	23
safe haven	27	24	goal is terror or destruction	29	23	ability to get to target	27	24	safe haven	28	24
recall-ability of weapon	27	24	ability to get to target	28	25	Retaliation	26	25	retaliation	27	25
experience of leadership	27	24	reliability and security within org	27	26	leadership resilience	25	26	existence of contingency plans	25	26
training & knowledge of specialists	27	24	leadership resilience	26	27	Euphoria (from being the first)	24	27	technical sophistication of foot soldiers	24	27
ideology	26	28	risk thresholds and preferences for types of risk	24	28	trade-off between risk of detection and risk of detonation	23	28	confidence in nuclear materials	22	28
military or civilian background	25	29	proclivity toward risk	24	28	sense of urgency	23	28	sense of urgency	22	28
political goals	24	30	reliability of personnel	22	30	external threat	22	30	dedication to follow-through	22	28
wanting to take credit	23	31	links to constituency	21	31	training & knowledge of specialists	22	30	best use of the weapon	21	31
technical sophistication of leadership	23	31	self-importance	21	31	confidence in nuclear materials	21	32	nature of weapon	21	31
homogeneity of	23	31	technical	20	33	existence of	21	32	reliability of	20	33

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group			sophistication of leadership			contingency plans			personnel		
goal is terror or destruction	21	34	weapon is indicator of leadership	19	34	viable retaliation targets	19	34	assessment of vulnerabilities	19	34
path of acquisition	21	34	funding capacity	19	34	dedication to follow-through	19	34	recall-ability of weapon	19	34
funding capacity	20	36	awareness of literature	18	36	nature of weapon	18	36	leadership resilience	19	34
power struggles in the organization	20	36	size of weapons	17	37	Personalities	17	37	power struggles in the organization	19	34
number of nuclear weapons	19	38	confidence in nuclear materials	17	37	experience of leadership	17	37	links to constituency	16	38
culture of the country of origin	19	38	nature of weapon	17	37	number of competitors	16	39	weapon is indicator of leadership	16	38
personalities	19	38	ease of getting 1st weapon	16	40	changing goals/removing targets	15	40	path of acquisition	15	40
nature of weapon	18	41	adaptability & resourcefulness	16	40	number of weapons	15	40	proximity of members to each other	15	40
link to state sponsors	17	42	recall-ability of weapon	15	42	number of nuclear weapons	15	40	ease of getting 1st weapon	14	42
salvage-ability of weapon	17	42	changing goals/removing targets	13	43	size of weapons	15	40	Euphoria (from being the first)	14	42
ease of getting 1st weapon	17	42	Euphoria (from being the first)	13	43	wanting to take credit	14	44	number of weapons	13	44
awareness of literature	17	42	proximity of members to each other	13	43	path of acquisition	14	44	external threat	12	45
withdrawal of justification	16	46	number of nuclear weapons	12	46	self-importance	12	46	technical sophistication of leadership	12	45
proximity of members to each other	16	46	financial backing (consequences)	11	47	recall-ability of weapon	11	47	homogeneity of group	12	45
financial backing (consequences)	14	48	number of weapons	11	47	technical sophistication of foot soldiers	11	47	wanting to take credit	11	48
viable retaliation targets	14	48	wanting to take credit	10	49	adaptability & resourcefulness	10	49	perception of religious justification for use	10	49
links to constituency	13	50	external threat	9	50	homogeneity of group	10	49	salvage-ability of weapon	10	49
size of weapons	13	50	number of competitors	9	50	whether there has been a nuke use in interval	9	51	number of competitors	9	51
technical sophistication of foot soldiers	12	52	link to state sponsors	9	50	salvage-ability of weapon	9	51	whether there has been a nuke use in interval	9	51
dedication to follow-through	12	52	whether there has been a nuke use in interval	9	50	ease of getting 1st weapon	9	51	viable retaliation targets	9	51
retaliation	11	54	best use of the weapon	9	50	withdrawal of justification	9	51	changing goals/removing targets	9	51
existence of	11	54	perception of	9	50	lawyer problem	9	51	number of nuclear	9	51

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contingency plans			religious justification for use						weapons		
external threat	9	56	path of acquisition	9	50	awareness of literature	9	51	size of weapons	9	51
number of competitors	9	56	salvage-ability of weapon	9	50	length of shock from acquisition	9	51	withdrawal of justification	9	51
whether there has been a nuke use in interval	9	56	withdrawal of justification	9	50	culture of the country of origin	9	51	lawyer problem	9	51
changing goals/removing targets	9	56	lawyer problem	9	50	mesmerization by technology	9	51	awareness of literature	9	51
number of weapons	9	56	existence of contingency plans	9	50	proclivity toward risk	9	51	length of shock from acquisition	9	51
confidence in nuclear materials	9	56	length of shock from acquisition	9	50	technical sophistication of leadership	9	51	culture of the country of origin	9	51
lawyer problem	9	56	culture of the country of origin	9	50	weapon is indicator of leadership	9	51	mesmerization by technology	9	51
length of shock from acquisition	9	56	mesmerization by technology	9	50	military or civilian background	9	51	self-importance	9	51
mesmerization by technology	9	56	experience of leadership	9	50	funding capacity	9	51	military or civilian background	9	51
self-importance	9	56	military or civilian background	9	50	proximity of members to each other	9	51	funding capacity	9	51

Bold denotes variables consistently in the top 10 across all four models.

Italics denote variables consistently in the top 15 across all models.

~~Strike-through~~ denotes variables consistently receiving no high rankings in any of the four models.

Table 6: Overall Ranking after Elicitation

<i>Al Qaida</i>			<i>Right Wing</i>			<i>General Nuclear</i>			<i>General Radiological</i>		
Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank	Variable	Total	Rank
reliability and security of communications	74	1	political goals	78	1	assessment of external threat	68	1	assessment of external threat	60	1
<i>ability to get to target</i>	62	2	internal structures/level of trust	63	2	reliability and security of communications	60	2	reliability and security of communications	58	2
internal structures/level of trust	60	3	assessment of external threat	61	3	reliability and security within org	58	3	political goals	52	3
reliability of personnel	53	4	<i>definition of success</i>	60	4	<i>assessment of vulnerabilities</i>	52	4	<i>definition of success</i>	51	4
confidence in weaponization/delivery	52	5	<i>assessment of vulnerabilities</i>	49	5	internal structures/level of trust	50	5	assumptions about response to weapon use	50	5
reliability and security within org	43	6	reliability and security within org	47	6	link to state sponsors	44	6	reliability and security within org	50	5
assessment of external threat	41	7	reliability of personnel	47	6	reliability of personnel	39	7	internal structures/level of trust	49	7
safe haven	41	7	homogeneity of group	40	8	goal is terror or destruction	38	8	<i>assessment of vulnerabilities</i>	45	8
goal is terror or destruction	41	7	enemy's knowledge that they possess	35	9	enemy's knowledge that they possess	36	9	goal is terror or destruction	41	9

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perception of religious justification for use	34	10	weapon			weapon			technical sophistication of foot soldiers	41	9
			retaliation	31	10	Ideology	36	9			
<i>risk thresholds and preferences for types of risk</i>	32	11	links to constituency	31	10	<i>risk thresholds and preferences for types of risk</i>	32	11	reliability of personnel	41	9
<i>definition of success</i>	32	11	<i>risk thresholds and preferences for types of risk</i>	30	12	trade-off between failing impotent and failing deadly	31	12	previous C&C (and perception of them)	38	12
training & knowledge of specialists	30	13	confidence in weaponization/ delivery	29	13	previous C&C (and perception of them)	31	12	trade-off between risk of detection and risk of detonation	35	13
previous C&C (and perception of them)	29	14	viable retaliation targets	28	14	<i>ability to get to target</i>	29	14	link to state sponsors	32	14
<i>assessment of vulnerabilities</i>	28	15	<i>ability to get to target</i>	26	15	financial backing (consequences)	28	15	<i>risk thresholds and preferences for types of risk</i>	31	15
enemy's knowledge that they possess weapon	28	15	proclivity toward risk	26	15	<i>definition of success</i>	28	15	<i>ability to get to target</i>	31	15
ideology	28	15	dedication to follow-through	26	15	trade-off between risk of detection and risk of detonation	27	17	ideology	24	17
trade-off between failing impotent and failing deadly	27	18	trade-off between failing impotent and failing deadly	25	18	confidence in weaponization/ delivery	26	18	retaliation	22	18
number of weapons	26	19	previous C&C (and perception of them)	24	19	path of acquisition	26	18	external threat	22	18
best use of the weapon	24	20	path of acquisition	23	20	training & knowledge of specialists	25	20	enemy's knowledge that they possess weapon	22	18
confidence in nuclear materials	24	20	training & knowledge of specialists	23	20	viable retaliation targets	24	21	best use of the weapon	22	18
number of nuclear weapons	21	22	goal is terror or destruction	21	22	number of weapons	23	22	path of acquisition	20	22
link to state sponsors	20	23	reliability and security of communications	21	22	Retaliation	22	23	training & knowledge of specialists	20	22
culture of the country of origin	20	23	link to state sponsors	19	24	safe haven	22	23	lawyer problem	19	24
trade-off between risk of detection and risk of detonation	19	25	funding capacity	19	24	political goals	22	23	funding capacity	19	24
leadership resilience	19	25	power struggles in the organization	19	24	external threat	20	26	adaptability & resourcefulness	19	24
funding capacity	19	25	trade-off between risk of detection and risk of detonation	18	27	lawyer problem	20	26	financial backing (consequences)	18	27
political goals	18	28	external threat	17	28	funding capacity	19	28	dedication to follow-through	18	27
technical sophistication of foot soldiers	18	28	sense of urgency	17	28	assumptions about response to weapon use	15	29	confidence in weaponization/ delivery	17	29
wanting to take credit	17	30	leadership resilience	17	28	perception of religious justification for use	15	29	military or civilian background	17	29
existence of contingency	17	30	proximity of members to each	17	28	power struggles in the organization	15	29	proclivity toward risk	16	31

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plans			other								
external threat	13	32	ideology	16	32	technical sophistication of leadership	14	32	perception of religious justification for use	15	32
viable retaliation targets	13	32	changing goals/removing targets	16	32	dedication to follow-through	14	32	homogeneity of group	15	32
recall-ability of weapon	12	34	military or civilian background	16	32	homogeneity of group	13	34	number of weapons	14	34
nature of weapon	11	35	withdrawal of justification	15	35	links to constituency	12	35	viable retaliation targets	13	35
proclivity toward risk	11	35	financial backing (consequences)	14	36	best use of the weapon	12	35	safe haven	13	35
homogeneity of group	11	35	confidence in nuclear materials	13	37	culture of the country of origin	12	35	links to constituency	13	35
sense of urgency	10	38	number of competitors	12	38	adaptability & resourcefulness	12	35	confidence in nuclear materials	13	35
personalities	10	38	best use of the weapon	12	38	leadership resilience	11	39	awareness of literature	13	35
dedication to follow-through	10	38	wanting to take credit	11	40	confidence in nuclear materials	10	40	existence of contingency plans	11	40
whether there has been a nuke use in interval	9	41	perception of religious justification for use	11	40	recall-ability of weapon	9	41	trade-off between failing impotent and failing deadly	10	41
financial backing (consequences)	9	41	number of nuclear weapons	11	40	technical sophistication of foot soldiers	9	41	leadership resilience	10	41
salvage-ability of weapon	9	41	number of weapons	10	43	number of nuclear weapons	8	43	wanting to take credit	8	43
adaptability & resourcefulness	8	44	Euphoria (from being the first)	10	43	ease of getting 1st weapon	8	43	number of competitors	7	44
retaliation	7	45	personalities	10	43	proclivity toward risk	8	43	whether there has been a nuke use in interval	7	44
number of competitors	7	45	existence of contingency plans	9	46	number of competitors	7	46	changing goals/removing targets	7	44
assumptions about response to weapon use	7	45	length of shock from acquisition	9	46	whether there has been a nuke use in interval	7	46	number of nuclear weapons	7	44
changing goals/removing targets	7	45	safe haven	8	48	wanting to take credit	7	46	size of weapons	7	44
links to constituency	7	45	technical sophistication of foot soldiers	8	48	changing goals/removing targets	7	46	salvage-ability of weapon	7	44
size of weapons	7	45	whether there has been a nuke use in interval	7	50	size of weapons	7	46	nature of weapon	7	44
path of acquisition	7	45	assumptions about response to weapon use	7	50	salvage-ability of weapon	7	46	ease of getting 1st weapon	7	44
ease of getting 1st weapon	7	45	size of weapons	7	50	nature of weapon	7	46	recall-ability of weapon	7	44
withdrawal of justification	7	45	salvage-ability of weapon	7	50	withdrawal of justification	7	46	withdrawal of justification	7	44
lawyer problem	7	45	nature of weapon	7	50	existence of contingency plans	7	46	sense of urgency	7	44
awareness of literature	7	45	ease of getting 1st weapon	7	50	awareness of literature	7	46	length of shock from acquisition	7	44
length of shock from acquisition	7	45	recall-ability of weapon	7	50	sense of urgency	7	46	culture of the country of origin	7	44
mesmerization by technology	7	45	lawyer problem	7	50	length of shock from acquisition	7	46	mesmerization by technology	7	44
Euphoria (from being the first)	7	45	awareness of literature	7	50	mesmerization by technology	7	46	Euphoria (from being the first)	7	44

technical sophistication of leadership	7	45	culture of the country of origin	7	50	Euphoria (from being the first)	7	46	technical sophistication of leadership	7	44
self-importance	7	45	mesmerization by technology	7	50	self-importance	7	46	self-importance	7	44
weapon is indicator of leadership	7	45	sophistication of leadership	7	50	Personalities	7	46	personalities	7	44
experience of leadership	7	45	self-importance	7	50	weapon is indicator of leadership	7	46	weapon is indicator of leadership	7	44
military or civilian background	7	45	weapon is indicator of leadership	7	50	experience of leadership	7	46	experience of leadership	7	44
power struggles in the organization	7	45	experience of leadership	7	50	military or civilian background	7	46	power struggles in the organization	7	44
proximity of members to each other	7	45	adaptability & resourcefulness	7	50	proximity of members to each other	7	46	proximity of members to each other	7	44

Bold denotes variables consistently in the top 10 across all four models.

Italics denote variables consistently in the top 15 across all models.

~~Strike-through~~ denotes variables consistently receiving no rankings in any of the four models.

As with the expert rankings, the full group ranked several variables highly across the four models during and after the elicitation. Twelve variables were strongly identified within the top 15 of almost all of the models; seven more were often in the top 15 and generally at least within the top 30.

Strongly Identified

- Definition of success
- Internal structures/level of trust
- Confidence in weaponization/delivery
- Previous command and control (and perception of them)
- Assessment of external threat
- Enemy's knowledge that they possess weapon
- Reliability and security of communications
- Assumptions about response to weapon use
- Reliability and security within org
- Risk thresholds and preferences for types of risk
- Ability to get to target
- Assessment of vulnerabilities

Consistently Identified

- Trade-off between failing impotent and failing deadly
- Political goals
- Ideology
- Training & knowledge of specialists
- Retaliation
- Reliability of personnel
- Link to state sponsors

Table 7: Integrated Variable Ranking

Variables	Expert (during)				Expert (after)				Overall (during)				Overall (after)			
	A Q	R W	G N	G R	A Q	R W	G N	G R	A Q	R W	G N	G R	A Q	R W	G N	G R
Ability to get to target	*	†† †	††	**	***	††	*	*	*	††	††	**	***	*	*	*
Assessment of external threat	**	***	***	***	***	***	***	***	*	***	**	**	**	***	***	***
Assessment of vulnerabilities	***	**	***		*	***	**	**	**	*	**		*	***	***	**
Assumptions about response to weapon use	**	***	**	***			††	*	*	***	*	**			†	***
Confidence in weaponization/delivery	***	*	**	††	**	*	*		**	**	**	**	***	*	†† †	†
Definition of success	***	***	***	***		***	†	*	***	***	**	***	*	***	*	***
Enemy's knowledge that they possess weapon	**	***	**	*	*	†† †	***	†† †	*	***	*	*	*	**	**	†† †
Financial backing (consequences)			*	*			††	††			*	†† †			*	†
Goal is terror or destruction	†	†† †	†† †	**	††	†† †	*	**		††	*	*	**	††	**	**
Ideology	††	**	*	†† †	†	†	***	†† †	†	**	*	††	*		**	†† †
Internal structures/level of trust	***	**	***	***	***	***	***	***	***	**	**	***	***	***	***	**
Link to state sponsors			*	*	†† †	†† †	**	**			*	†† †	††	††	**	*
Path of acquisition	†					*	*	†† †						†† †	†† †	††
Perception of religious justification for use	†† †		*		**		††	†	†† †		*		**		†	
Political goals		***	**	***		***		***	†	***	**	***	†	***	††	***
Previous command and control (and perception of success)	†† †	††	**	**	*	*	*	***	***	*	**	***	*	†† †	*	*

Reliability and security of communications	*	**	**	**	***	††	***	***	††	**	**	***	***	††	***	***
Reliability and security within organization	***	††	***	**	**	††	**	***	***	†	**	**	**	**	***	***
Reliability of personnel	**	†	†	†	***	**	**	**	***	†	††		***	**	**	**
Retaliation		*	††	††		††	††	††		*	††	††		**	††	††
Risk thresholds and preferences for types of risk	***	††	††	††	**	**	**	*	**	†	*	††	*	*	*	*
Trade-off between failing impotent and failing deadly (nuke only)	*	*		††	††	*	†		***	††	††	*	††	††	*	
Trade-off between risk of detection and risk of detonation	††	*	††	††	††		††	*	*	*	†	††	††	†	††	*
Training and knowledge of specialists	††	*	††	††	*	*	*	††	††	††	†	*	*	††	††	††
Viable retaliation targets		*	†		††		*	†		**			*	††		

Context and Dynamics

While the brainstorming sessions provided a large number of potentially salient variables that might influence VNSA command and control decision making, the major disadvantage of the technique is that it does not reflect dynamics or contextual contingencies. The discussions surrounding clustering these variables can bring us some way towards this objective, but it is the scenario techniques (the role-playing and future backwards exercises during the workshop) that truly embed the topic within context and can shed additional light on the factors influencing C2 decisions, as well as the relationships between them.

From the discussions surrounding the brainstorming, the following ideas emerged regarding the dynamics of RN command and control decisions and the influences thereupon:

- The complexity of the RN operation, the risk thresholds of decision makers and the capability to manage an RN attack interact and together operate to influence RN C2 decision making.
- There are a number of tradeoffs that will likely operate in any VNSA RN command and control decision:
 - Failing deadly versus failing impotent (reliability of success versus control/reliability of operational personnel)³⁵¹
 - Technical and tactical complexity versus detection and interdiction risk
 - Control by technical types versus operational types

³⁵¹ This was the most consistently referenced tradeoff throughout the elicitation, especially in discussions of nuclear weapons.

- Taking credit versus not wanting to be revealed
- The tradeoffs will be determined by several factors (ideology, objectives, risk thresholds), most of which will be invisible to (or at least difficult for) external observation
- Perpetrator vulnerability assessments will be dynamic and influenced by, inter alia, counterterrorist efforts, ideology, technological development (for instance, the sensitivity and reliability of detectors)
- Novel emotional reactions might interact with other decision-making considerations, including the euphoria of being the first to obtain a radiological, and especially nuclear, weapon. Also, actors may attach a mystical significance to the weapon. The dynamic aspects of this include the duration of these effects.
- Multiple sources of authority (e.g., operational, legal/spiritual, cultural) could interact and impede C2.
- Murphy's law dynamic: how robustly does the organization deal with the unexpected? How does the leadership react to setbacks (resilience and adaptability)?
- Inter- and intra-organizational power struggles:
 - Role of the RN weapon as a symbol of leadership
 - Factionalization
 - Degree of trust / homogeneity of preferences between leaders and followers
- Dynamism of the goals: can goals change during the weapons acquisition / deployment process?
- Dynamics of the mission lifecycle – C2 might vary at different points in the mission. Relates to both time itself and the perception of time held by decision makers.

Interesting elements that emerged when considering RN command and control decisions in a specific context included:

- The group that believed they had nothing left to lose opted for a delegative approach.
- The group that sought to blackmail authorities selected a delegative approach.
- The group that placed a high emphasis on success chose a delegative approach (unlike what some of the theory might predict).

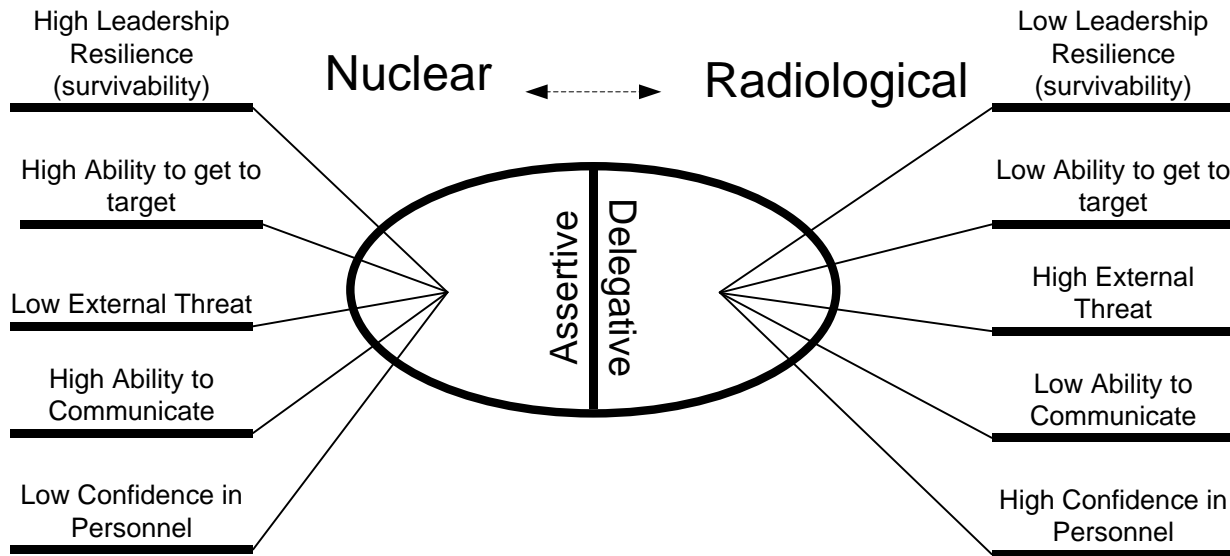
The results of the Future Backwards exercise are presented in Appendix 4. These exercises highlighted the notion that delegative and assertive command and control approaches were not binary options, but existed on a continuum. Indeed, there was only a single unequivocally assertive and a single unequivocally delegative command and control structure among the ten. There were three hybrid approaches, two of which were assertive with respect to the date and time of the attack but delegative with respect to the precise target and other operational elements.³⁵²

Models

Each group of participants created a separate model of the factors affecting the command and control decisions by a VNSA. These three models and the pre-elicitation model to be reviewed are presented below.

³⁵² A handful of participants settled on attacks that did not require any specific delegative or assertive policy, for example, where the leaders were also part of the operational team, or where the entire attack was carried out remotely. One expert, contrary to instructions, devised an attack with a state actor.

Model 1

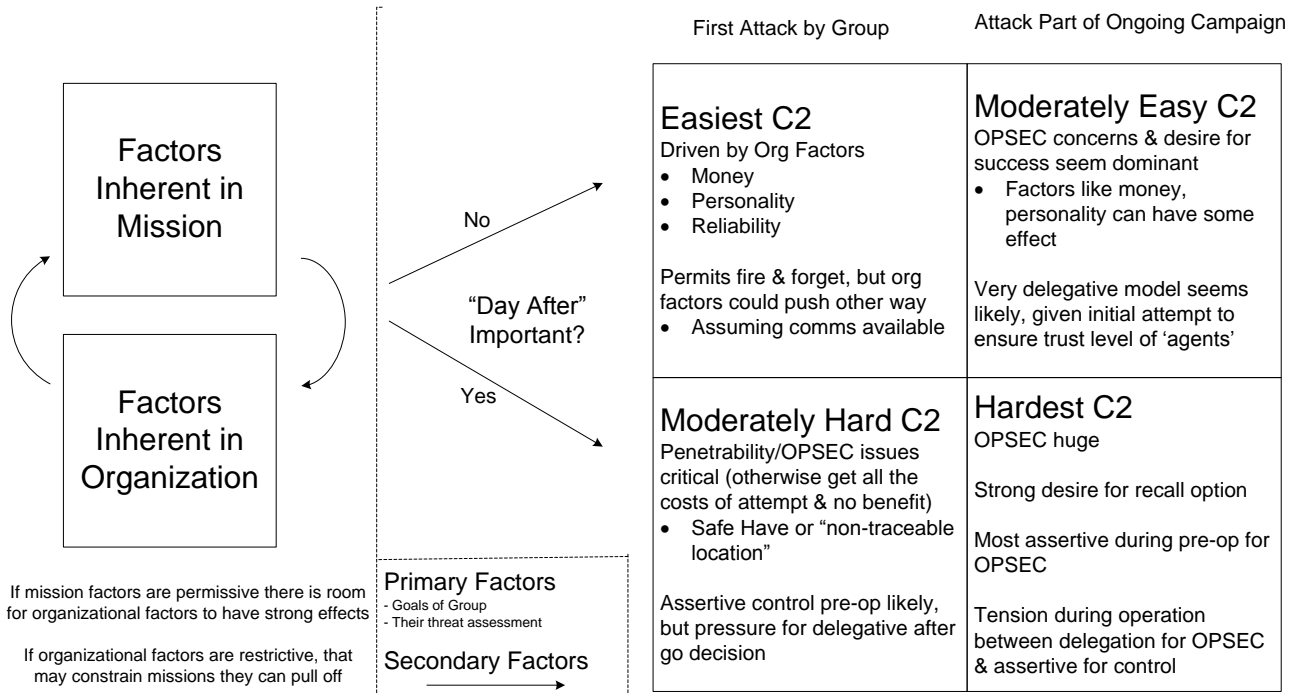


Model 1 assumes that a nuclear attack is such an exceptional event that the group would not pick low trust/low competence people to carry out the mission. It also assumes that the power struggle of who would detonate and make the final call would be handled beforehand and subject to groupthink mentality. Since success is obtained at such a high performance level (assuming that success is defined as the nuclear bomb going off), the group must be highly adaptive to last minute changes in the field; therefore, five variables were chosen on an "it depends" basis:

1. Group/leadership resiliency
2. Ability to get to the target
3. Communication
4. High competence/high trust personnel
5. External Threat

It was noted that the overall nature of the attack will drive the command and control structure of the group to be more assertive than delegative. Additionally, the decision to use a nuclear weapon could create further factions in the group that may need to be isolated from the rest of the organization.

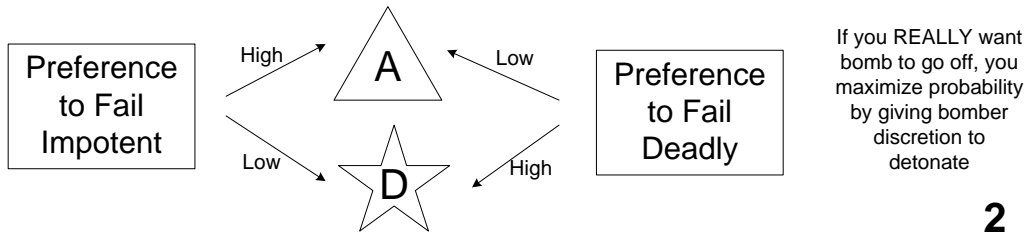
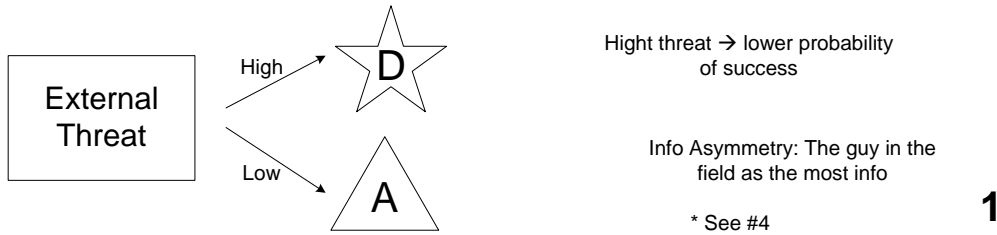
Model 2



The principle factors in Model 2 are the mission and the organization (mutually constraining) where it is assumed that communication is available between the individuals carrying out the mission and the leaders in the organization. If communication is not available, then the mission is fire-and-forget. The two main factors that drive decision making in this model are the goals of the group and the threat assessment (note that this model is intended to assess the entire organization, not just direct actors). The group's self-preservation orientation is also critical. This breaks down so the group has four modes of operation:

1. If it is the first attack and there is no day after: This is the easiest scenario to control. The attack is driven by money and personality of group members. Organizational factors can have wide effects that either permit or discourage a fire-and-forget mission.
2. If there is an ongoing campaign and no day after: This has moderately easy command and control. Money and personality of group members have some effect on group dynamics, but there is a high degree of trust for the agents who are kept under close surveillance. This is because the success of the mission is more important.
3. If it is the first attack and there is a day after: The group wants the maximum chance of success, thus it is moderately difficult to carry out. This is trumped, however, if the leaders believe they are not traceable or logistically removed from the attackers.
4. If there is an ongoing attack and a day after: This has the most difficult command and control. The command and control may be strained for the preliminary stages of the mission as there is pressure to keep assertive control of the group. The ability to recall is more important in case the target changes.

Model 3



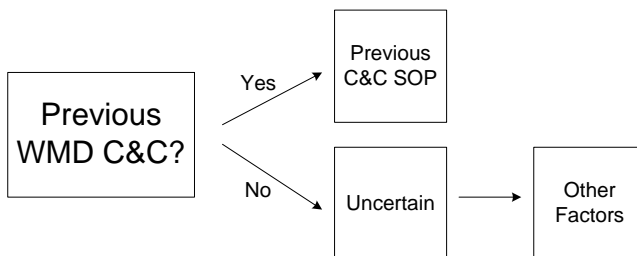
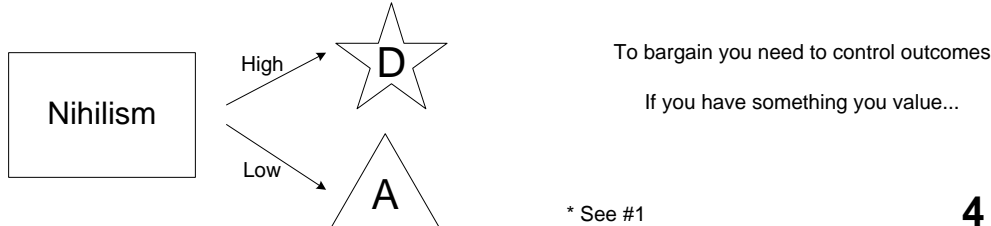
Competence

Trust

	High	Low
High	Complete Delegation (Perfect Agent)	Checks & Balances (Commissar)
Low	Leadership can pull trigger	No Delegation

Radiological Weapons require MORE technical competence to deploy in field

3



In Model 3, if there is a high external threat then there is a great deal of delegation because the organization fears decapitation. The driving idea behind this is that if you delegate authority then it is more difficult for the leadership to be incapacitated in the attack. This is modeled after al Qaida's pre and post 9-11 organizational structures.

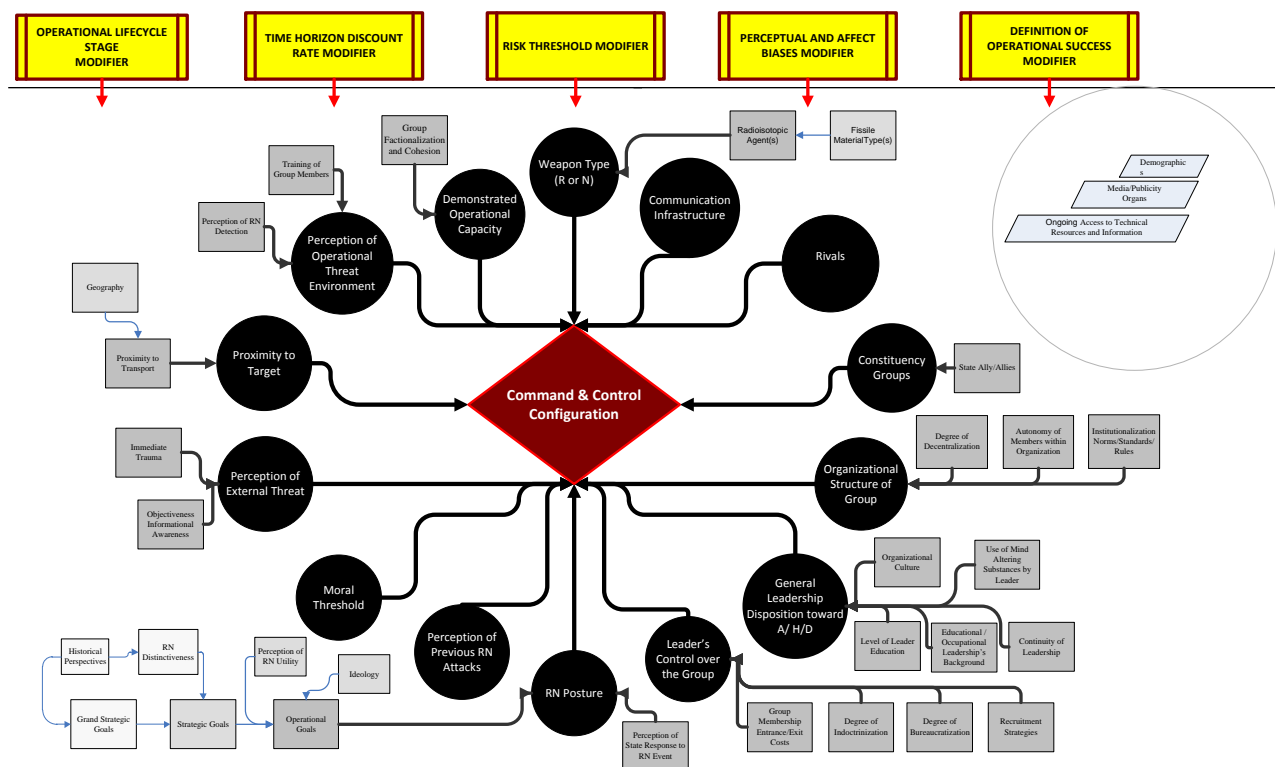
Secondly, the group must have a preference for either failing impotently or failing deadly. If the group feels it is more important to fail deadly, then the field agents have more authority so they can pull the trigger if they feel threatened. If the group feels it is more important to fail impotent, then there is more central control because the leaders will not want the field agents to be able to change their minds based on what happens in the field.

Thirdly, the relationship between trust and competence is important. If there is a high level of trust and competence then authority is delegated. If there is no trust and no competence among field operatives then the leaders need to have remote operability. The goal of the mission will be affected by who the organization can persuade to carry it out (e.g. it will be less complex if the only available operators are low in competency and trust).

Fourth, the degree to which the mission is nihilistic is important. If the goal of the mission is to cause as much damage as possible then there is more room for delegation. However, if the group is more realistic with its goals, then for the leaders will tend to favor greater control over the mission. This trumps the first principle (the degree of external threat).

Finally, satisfactory previous experience fielding WMD will likely be replicated in the future. However, if it was either unsatisfactory or there is no previous experience, other factors will likely dominate the decision.

Model 4: Model Derived from Literature Review



Model 4 provides a more complex, less parsimonious model that differentiates between proximate, distal and holistic influences on the RN posture of a VNSA. A range of modifiers can shape the salience and impact of the more directly influential factors.

Differences between Radiological and Nuclear C2

Only Model 3 identified a significant difference between the command and control structures necessary for the deployment of a radiological weapon instead of a nuclear one. Noting that the successful deployment of radiological weapons requires greater technical competence in the field, these requirements may override trust considerations in step 4.

Implicit Model Evaluation

As a crude assessment of the experts' preferences for the various models that were developed and presented during the previous sessions, the participants were each given two sets of 25 colored plastic "chips." Using one set of 25 chips, the experts were tasked with "betting" on the various models of nuclear command and control (placing their desired amount of chips on a paper quadrant representing that model) as a reflection of nuclear weapon VNSA command and control, thus displaying not only their preference across the models, but also the strength of their preference for each model. They were then asked to replicate this exercise with the second set of 25 chips for the context of radiological weapon VNSA command and control. The chips were then totaled and collected for further analysis.

Table 8 shows the overall results of this procedure, for nuclear and radiological weapons command and control respectively.

Table 8: Implicit Model Evaluation Results

Model	Chip Count (Nuclear)	Chip Count (Radiological)
1	81	79
2	78	78
3	50	41
4 (Pre-Elicitation)	16	31

In the ensuing discussion it was determined that, while most of the participants liked many of the aspects of Models 1 and 2, the lower ranking of the Models 3 and 4 did not mean that these models did not contain valuable variables and insights. Moreover, evaluation of the pre-elicitation model may have suffered from the facts that none of the participants had participated in its development (and thus had little emotional attachment to the model) and that they were arguably least familiar with this model, having only received a brief presentation and handout. Indeed, one of the participants asserted that, even though it received the lowest bid, the START model might work through the other models.

Most importantly, the participants stressed the contingent and contextual aspects of any attempt to apply these models. In other words, most of the variables might come into play depending on what happens in the field in a particular setting, so it is difficult to say if one model is actually more effective than the other.

MODEL SYNTHESIS

With due regard to the inherent limitations of any model in terms of representing the myriad aspects of reality, the participants noted that Models 1 and 2 operated at somewhat different levels. It was agreed that the elements of Model 1 (together with some aspects of Models 3 and 4) applied in each of the quadrants of Model 2. Combining these two models reflected a way to operationalize more of the variables identified as salient in Day 1. The synthesized model thus consisted of first applying Model 2 in order to determine the broader command and control "frame" and then applying a modified version of Model 1 within this frame.

TEAM A / TEAM B EXERCISE

Summaries of participant discussions during the Team A / Team B exercise are contained in Appendix 5. In the first phase, the two teams explored the nuclear command and control structures of Hizballah. Team A directly applying the synthesized model, which combines Models 1 and 2, and situated Hizballah in the bottom right quadrant of the model, which allows for either a delegative or assertive C2 structure, or even a hybrid of both. Within the quadrant they found that the factors pointed in different directions, with no simple indication of whether the organization would be more delegative or assertive. Although the model did not provide a single answer, it did identify the complexities of the situation, as enumerated by Team B, who engaged in a thorough discussion of Hizballah's decision making. Team B's conclusion was that despite the reliability of its personnel and the high threat environment, the particular goal most likely to be seen in the case of Hizballah – using a nuclear weapon for compellence and/or deterrence – would most likely lead the group to adopt an assertive posture in order to maintain complete control of the weapon throughout the operation. However, even under these conditions, Team B believed that some elements of the operation might be delegated to the field personnel. Both teams also identified state sponsorship as a key variable in the Hizballah case, which might influence Hizballah's approach to risk and other variables.

When considering Aum Shinrikyo, Team A, after a detailed analysis, concluded that Aum would almost certainly adopt a delegative posture. Team B, applying the model, arrived in the upper right-hand quadrant and concluded that all factors indicated that Aum would follow a delegative posture.

Table 9: Team A / Team B Results

	Model	Case Study
Hizballah	Indeterminate	Assertive
Aum Shinrikyo	Delegative	Delegative

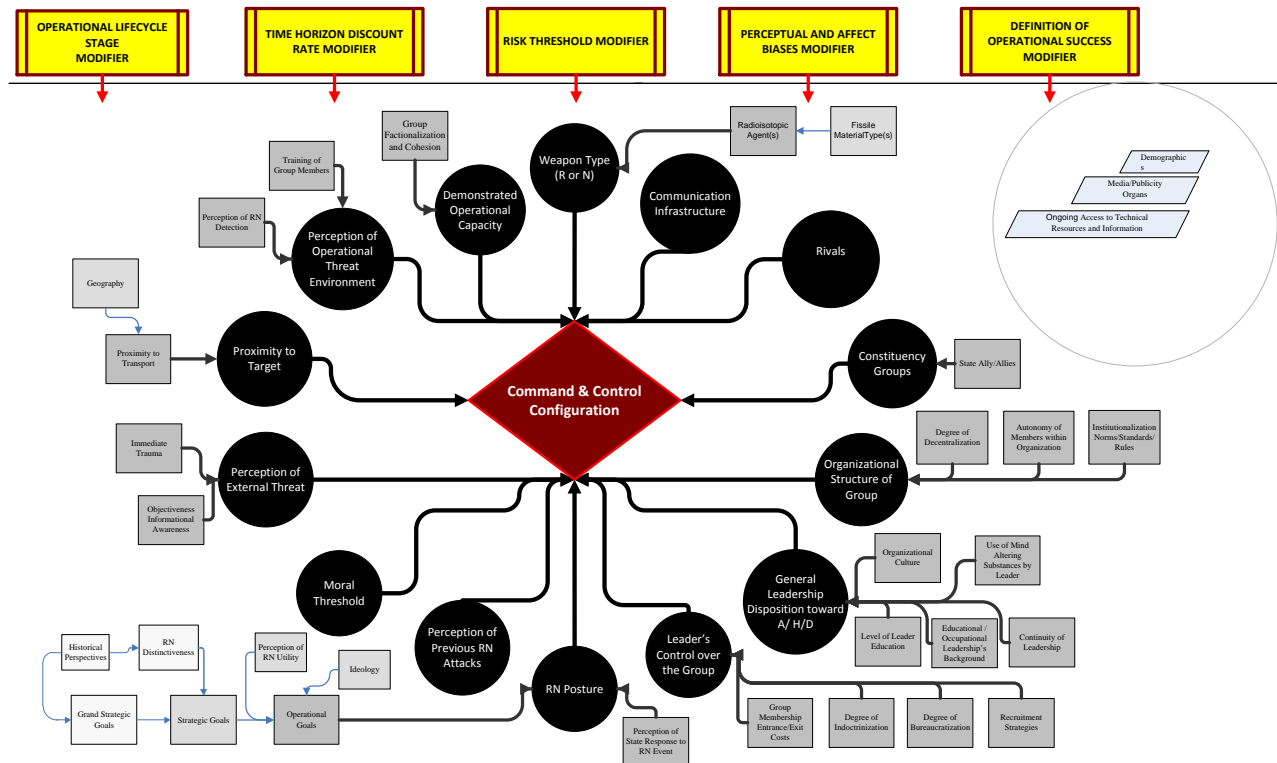
Interestingly, both teams ended up drawing on elements of Model 3 as a “tie-breaker” when Model 1 did not provide sufficient guidance. In addition, one of the participants observed that initial assumptions were crucial and drove the entire process, which becomes somewhat path dependent.

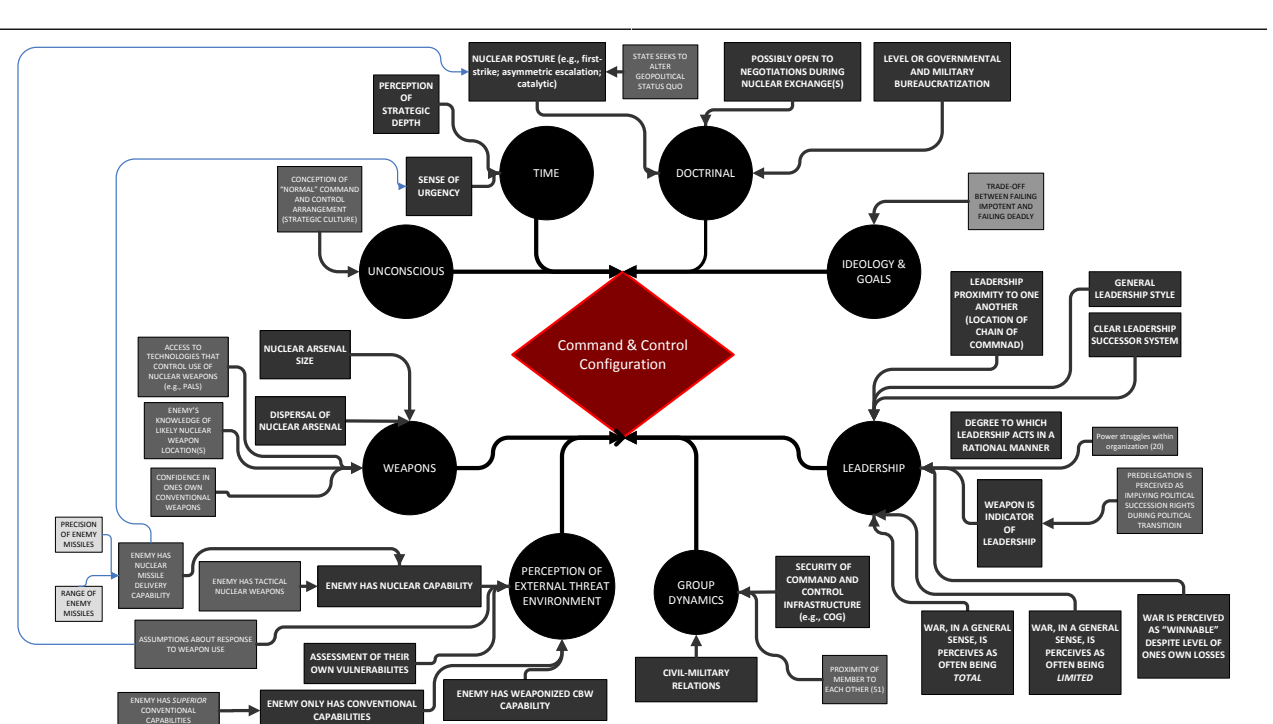
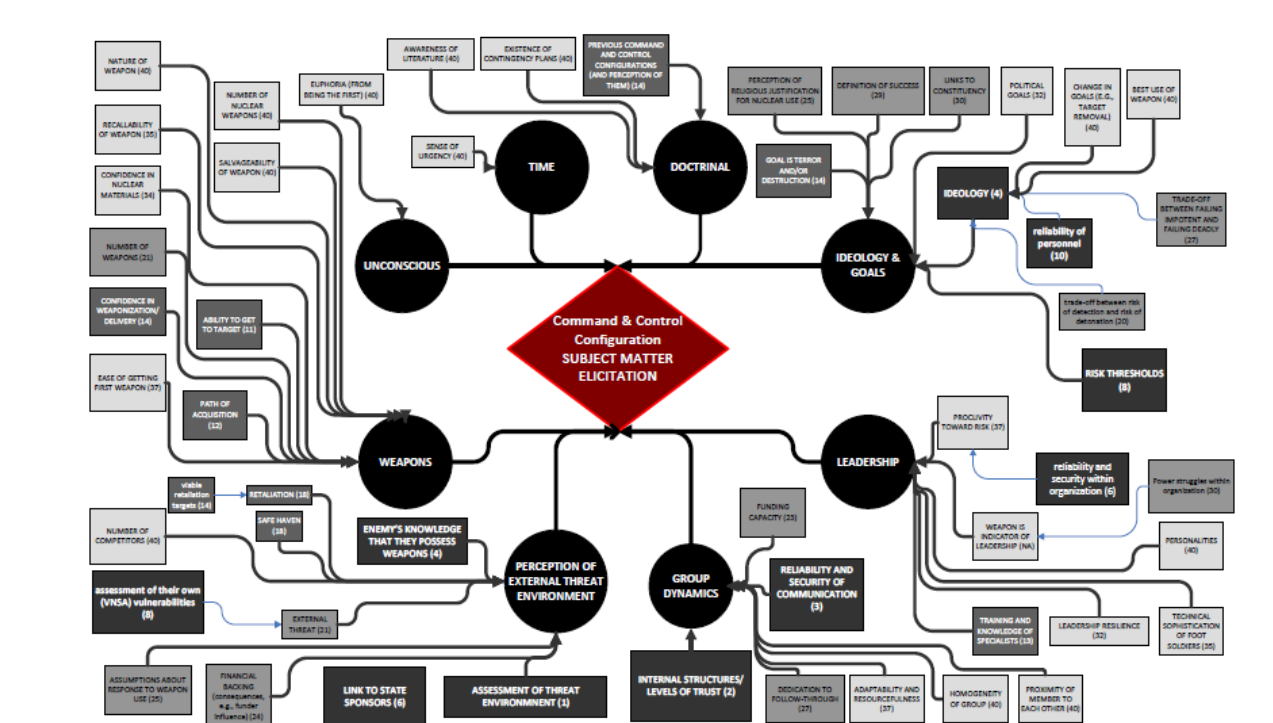
Methodology for Developing a Command and Control Model and Initial Outcomes for Six VNSAs

Overview

After researchers completed this project's literature review, it was clear that a multitude of factors influenced how states and non-state actors approach and attempt to resolve the challenges of dominion and delegation—the “extension of authority over distance”—inherent in a variety of human enterprises. The literature on general organizational, state nuclear, and VNSA conventional command and control demonstrates this plentitude of variables (see Figure 11, also available here [\[PDF\]](#)). The project's subsequent subject matter expert elicitation similarly illustrated an unwieldy number of factors identified by participants for both states and notional violent non-state actor nuclear command and control (see Figure 12 also available here [\[PDF\]](#)). Following the elicitation, the research team integrated the factors and models identified/developed through the literature survey and elicitation (see Figure 13, also available here [\[PDF\]](#)).

Figure 11: Pre-Elicitation Model





These preliminary models were clearly too complex and unwieldy for analysis. In order to resolve this challenge and apply it to extant and notional terrorist groups, the project's methodology called for a five step process.

I.

Seeking a more limited and manageable number of model inputs, researchers identified the key factors in the extant models that appeared to capture the primary dynamics of the phenomenon. These factors were then separated into two categories: those possessing a primary impact on command and control and those with a secondary impact. Primary factors were chosen so that if their value was known, researchers could directly explain variances in the command and control outcomes, i.e., assertive, delegative or pre-determined, while secondary factors impacted the values of the primary factors and thus operated on the dependent variable indirectly. Ultimately, ten primary (see Table 10) and a dozen secondary factors were identified and investigated to see how they interacted to form a basic model—one in which the impact of secondary factors on primary factors was observable and described how different primary factors affected each other.

Each primary and secondary factor underwent analysis to assess the potential for multicollinearity, i.e. how each factor affected the value of the other factors. To maximize the efficiency of the analytic process by avoiding examining every possible interaction, the researchers first assessed how secondary factors might affect primary variables and then how each primary affected each other primary. The final configuration was informed by the discussions and factor weighting that took place at the elicitation, analyses of the literature review, general background knowledge of the researchers and basic principles of logic.

II.

Researchers then considered how different values of each of the ten primary factors *acting independently* might affect command and control configurations by developing a matrix of expected effects. Again, this process was informed by outcomes from the elicitation, literature review analyses, and common logic. Table 10 displays the matrix. Using pluses and minuses as symbols of degree, a simple seven-point scale (a range of positive three to negative three) represented the rough order of magnitude of the expected effect of different values on the variables outcome (zero denotes no effect). This can be seen in each triple in graphical form.

Table 10: Matrix of Primary Factors and the Effect of Values

VARIABLE (VALUE)	PRE-DETERMINED	ASSERTIVE	DELEGATIVE
COMPETENCY high	0	0	0
COMPETENCY medium	0	0	---
COMPETENCY low	---	0	---
TRUSTWORTHINESS high	0	0	0
TRUSTWORTHINESS medium	---	0	---
TRUSTWORTHINESS low	---	---	---
COMMUNICATIONS high	0	0	0
COMMUNICATIONS medium	0	---	0
COMMUNICATIONS low	0	---	0
COMPLEXITY WEAPON TO TARGET high	---	++	---
COMPLEXITY WEAPON TO TARGET medium	---	+	0
COMPLEXITY WEAPON TO TARGET low	0	0	0
IMPORTANCE TO LEADER OF FLEXIBILITY IN THE FIELD high	---	0	0
IMPORTANCE TO LEADER OF FLEXIBILITY IN THE FIELD medium	---	0	0
IMPORTANCE TO LEADER OF FLEXIBILITY IN THE FIELD low	0	0	0
PERCEPTION OF EXISTENTIAL THREAT high	+	---	+
PERCEPTION OF EXISTENTIAL THREAT medium	0	---	0
PERCEPTION OF EXISTENTIAL THREAT low	0	0	0
TOLERANCE FOR UNCERTAINTY high	0	0	++
TOLERANCE FOR UNCERTAINTY medium	0	0	0
TOLERANCE FOR UNCERTAINTY low	++	+	---
PREVIOUS C & C PRE-DETERMINED SUCCESS	++	0	0
PREVIOUS C & C PRE-DETERMINED FAILURE	---	0	0
PREVIOUS C & C PRE-DETERMINED INDETERMINATE	0	0	0
PREVIOUS C & C ASSERTIVE SUCCESS	0	++	0
PREVIOUS C & C ASSERTIVE FAILURE	0	---	0
PREVIOUS C & C ASSERTIVE INDETERMINATE	0	0	0
PREVIOUS C & C DELEGATIVE SUCCESS	0	0	++
PREVIOUS C & C DELEGATIVE FAILURE	0	0	---
PREVIOUS C & C DELEGATIVE INDETERMINATE	0	0	0
PREFERENCE FOR "SUCCESS": specific outcome	+	++	0
PREFERENCE FOR "SUCCESS": suboptimal outcome - incorrect target	0	0	0
PREFERENCE FOR "SUCCESS": suboptimal outcome - fizzle acceptable	0	0	0
PREFERENCES FOR "FAILURE": fail impotent	+	++	0
PREFERENCES FOR "FAILURE": fail deadly	++	0	+

III.

The most basic way of combining the ten primary variables is to simply add the scores obtained for all of them. However, the resulting score fails to take into account differences in the salience of each primary variable in any particular instance of the model. It is very likely that the actual values of several of the primary factors have direct impacts on their relative salience vis-à-vis the other primary variables. Thus, it is necessary to develop an interactive system of analytical weights within the model.

To reflect these variances, project researchers iteratively developed different weighting functions for the values of the primary factors. Table 11 lists the factors to which these weighting functions apply. Note that an additional contingent term "X" was added as an additional weighing function. Its presence allows researchers to capture specific, unspecified contextual evidence that a particular primary factor possesses a higher or lower salience in a particular instance. Thus, X could represent extraneous factors that can affect the relative primary variable for a particular VNSA. The next step was the development of a simple schema for the values of the components of the weighting functions. The researchers' choice for each weighting function remained within a range that offered realistic weights and ensured overall plausibly. The weighting functions are shown in Table 12.

Table 11: Glossary of Weighted Factors

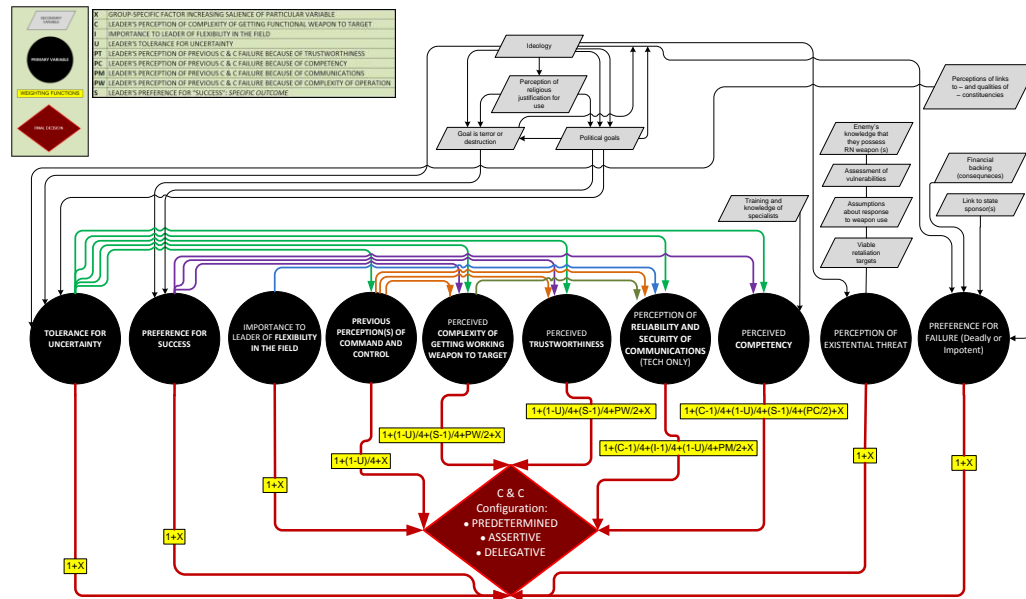
X	GROUP-SPECIFIC FACTOR INCREASING SALIENCE OF PARTICULAR VARIABLE
C	LEADER'S PERCEPTION OF COMPLEXITY OF GETTING FUNCTIONAL WEAPON TO TARGET
I	IMPORTANCE TO LEADER OF FLEXIBILITY IN THE FIELD
U	LEADER'S TOLERANCE FOR UNCERTAINTY
PT	LEADER'S PERCEPTION OF PREVIOUS C & C FAILURE BECAUSE OF TRUSTWORTHINESS
PC	LEADER'S PERCEPTION OF PREVIOUS C & C FAILURE BECAUSE OF COMPETENCY
PM	LEADER'S PERCEPTION OF PREVIOUS C & C FAILURE BECAUSE OF COMMUNICATIONS
PW	LEADER'S PERCEPTION OF PREVIOUS C & C FAILURE BECAUSE OF COMPLEXITY OF OPERATION
S	LEADER'S PREFERENCE FOR "SUCCESS": <i>SPECIFIC OUTCOME</i>

Table 12: Weighting Functions for Primary Factors

Weighting Function	
Competency	$1+(C-1)/4+(1-U)/4+(S-1)/4+(PC/2)+X$
Trustworthiness	$1+(1-U)/4+(S-1)/4+PT/2+X$
Communications	$1+(C-1)/4+(I-1)/4+(1-U)/4+PM/2+X$
Complexity of getting weapon to target	$1+(1-U)/4+(S-1)/4+PW/2+X$
Previous C&C	$1+(1-U)/4+X$
Perception of Existential threat	$1+X$
Tolerance of Uncertainty	$1+X$
Importance to leader of flexibility in the field	$1+X$
Preferences for success	$1+X$
Preferences for failure	$1+X$

The resulting final model of VNSA nuclear command and control with respect to nuclear weapons employment is shown in Figure 14 (also available here [\[PDF\]](#))

Figure 14: Final Model



IV.

The model factors and related considerations were then converted into a set of clear instructions for constructing group profiles. Thus, when an analyst seeks to model a particular VNSA's nuclear command and control, the following steps are taken:

1. Collection of data, especially related to primary and secondary factors, into a structured organizational profile.
2. Performance of analyses on these data to determine values for each of the primary values (see Figure 15).
3. Utilization of the matrix to determine the effect of each variable's value on the command and control outcome and assignment of the relative score for that section of the matrix.
4. Adding the scores of each outcome—the result is an unweighed total score.
5. Using the values for the variables to generate values for the components of the weighting functions.
6. Input of these values into the weighting functions to determine the total weight for each primary variable.
7. Multiply each raw score by the appropriate variable weight.
8. Total the weighed scores for each outcome and compare across outcomes.

Figure 15: Factor Analysis Example with Related Values

J. Leadership Preference for Type of “Failure”

1. Fail Deadly List all of the arguments for the leadership preferring that, in the event of mishap, mission failure still results in the detonation of the weapon, regardless of its location or any other considerations.

- a. Consider the following variables:
 - i. The group's ideology.
 - ii. The leadership's perception of the group's links to constituencies.
 - iii. The group's financial backing / financial backers.
 - iv. The group's link to state sponsor(s).
- b. Identify and explore other variables that you believe make it likely that leadership prefers to “fail deadly.”

2. Fail Impotent List all of the arguments for the leadership preferring that, in the event of mishap, mission failure results in an inert weapon; regardless of what occurs, if the mission's objectives are not reached the weapon will not detonate.

- a. Consider the following variables:
 - i. The group's ideology.
 - ii. The leadership's perception of the group's links to constituencies.
 - iii. The group's financial backing / financial backer(s).
 - iv. The group's link to state sponsor(s).

The final score shows not only the rank of the outcomes but also the relative likelihood of each outcome, i.e., how far apart each command and control configuration is from one another in likelihood.

V.

The entire process described on Step IV was applied to six VNSAs selected in conjunction with DNDO personnel. The profiled VNSAs were evenly split between groups previously identified as posing a significant RN threat and notional groups representative of a particular extremist milieu. This selection allowed the model to forecast the likely behavior of both known entities and those threats that have yet to manifest themselves. After completing the VNSA profile but prior to any scoring, the analyst made a qualitative estimation of the group's nuclear command and control configuration. Summary results for each of the profiles are reproduced in the following tables, while the full profiles can be accessed in Appendix 6.

VNSA Nuclear Command and Control Profile Summaries

The Republic's Defenders of Yahweh and the Constitution (RDYC)³⁵³	
Founding	2011
Ideology	Religious (Christian Identity) Anti-government/ anti-New World Order White Supremacist Anti-Semitic
Key Decision Makers	Benjamin James Eden – leader
Constituents	Americans White Supremacists/Nationalists
Specialists	Richard Hanlon – former US Army Special Forces; demolitions and engineering Leroy Wilkes – former US Army small arms/artillery repair; weapons and explosives Elliott Moore – current Army Ammunitions Specialist; potential access to high-powered weapons and explosives
Major Known Funding Sources	Members sold all non-essential possessions: homes, businesses, retirement accounts, etc. \$750,000 was pooled.
Tolerance for Uncertainty	Medium – While the organization prefers to follow a predetermined plan, pressures from law enforcement require some flexibility. Some uncertainty would be tolerated so long as the overarching goals are being met.
Definition of Success	Suboptimal Outcome (Target/Timing) – As long as the organization's goals of fighting the New World Order are being met, the leadership would settle for unexpected outcomes in some cases due to the ideological beliefs that their mission is being guided by Yahweh. Anti-government militias often have broad targets such as state or local government personnel, allowing them some flexibility in whether an attack is a success even if the main target is not hit.
Flexibility in the Field	High Importance – Due to police surveillance, the leadership values high flexibility to respond to an event as it unfolds in order to escape potential capture. Although white supremacist, the RDYC may allow for the flexibility to work with non-whites as long as it furthered the group's overall goals. Furthermore, flexibility to respond to changing

³⁵³ This is a fictional organization based on real right-wing extremist groups such as the Order, Militia of Montana and others. The RDYC is intended to show the overall behavioral and preference patterns of right-wing extremist organizations writ large.

	environments is also necessary should the group carry out attacks over a large geographic area.
Perceptions of Previous Command and Control Outcomes	<p>Pre-determined (n/a) – Organization has no experience with pre-determined command and control.</p> <p>Assertive (success) – The leadership has had success in previous attacks using an assertive command structure and due to the strong, domineering and manipulative nature of the RDYC leadership, this has been the preferred command and control structure of the organization with respect to operations using conventional weapons.</p> <p>Delegative (success) – Some white supremacist militias have had success with this style and it may be conducive to the type of leadership the RDYC demonstrates.</p>
Complexity of getting weapon to target	Low – Given that the organization is already on US territory, they do not face the geographical limitations of other terrorist organizations in attacking US targets. Members also have former military experience, which gives them the perception that an attack against the US would be of low complexity.
Trustworthiness of Relevant Group Members	Medium – Although generally the leadership trusts its members, it is prone to suspicions, such as when the RDYC leader killed his brother after a dispute over the group's direction.
Reliability and Security of Communications	High – Although the RDYC leaders are suspicious of communications, the group includes several members with recent military backgrounds and it has developed its own tools in a highly secure fashion, giving the leadership high confidence in the few tools that they do use.
Group Competency	High – The RDYC has several members who are highly skilled and trained in military tactics and explosives, giving the the leadership confidence in its group's competence.
Existential Threats	High – The RDYC is under constant threats and surveillance from law enforcement and it also believes generally that the world is collapsing.
Preference for "Failure"	Fail Deadly – Because the RDYC's goal is to broadly combat the NWO and to eject foreign soldiers from US soil, a weapon going off in the wrong place at the wrong time could still advance this goal and would be an accepted failure outcome.
Expert Estimated Nuclear C2	Delegative

Tehrik-e-Taliban Pakistan (TTP)	
Founding	2007
Ideology	Deobandi Islamist Anti-Shi'ite Apocalyptic Eschatology (fight in Afghanistan is beginning of the "End Time" battle, which will lead to the liberation of Jerusalem)
Key Decision Makers	Hakimullah Mehsud – leader Hafiz Gul Bahadar – Supreme commander N. Waziristan Taliban Maulana Waliur Rahman – TTP Finances
Constituents	Ahmedzai and Utmanzai Wazirs Mehsuds Other Mujahidin Muslim Umma
Specialists	Military training Weapons manufacturing
Major Known Funding Sources	Pakistani ISI for military resources and training; criminal undertakings; interactions with other terrorist organizations – totaling \$100 million
Existential Challenges	Pakistan-oriented agenda – alienating them from international support Internal discord
Tolerance for Uncertainty	Low – Pressures from US and Pakistani authorities and a need to maintain public image decrease the leadership's tolerance for unknown outcomes.
Definition of Success	Suboptimal Outcome (Target/Timing) – The leadership would settle for an unintended event outcome if it still promotes the group's overall goals of a worldwide Muslim identity and jihad. For example, during the CIA Khost attack, which resulted in several fatalities, TTP had open, undefined objectives, suggesting that a specific outcome is less important if overall goals are being met.

Flexibility in the Field	Medium Importance – As an umbrella organization, members of TTP have high flexibility within their territories, but face limitations outside of those territories. Flexibility is also valued by the TTP when working with other organizations in addition to its importance during an operation such as the flexibility operatives were granted in the Pakistani Army General Headquarters attack.
Perceptions of Previous Command and Control Outcomes	<p>Pre-determined (indeterminate) – Insufficient open source information.</p> <p>Assertive (success) – Viewed as successful during Marriott hotel bombing (2008), ISI provisional headquarters attack (2009) and Peshawar Pearl Continental Hotel bombing (2009).</p> <p>Delegative (indeterminate) – Insufficient open source information.</p>
Complexity of getting weapon to target	High – TTP is highly factionalized and believes that the US is constantly surveilling its activities, leading the organization to believe that it would be highly complex to get a nuclear weapon to a US target.
Trustworthiness of Relevant Group Members	Low – TTP is highly factionalized with competing members. TTP meetings have restricted attendance and leaders have reduced bodyguards to 1-2 highly trusted members. Also, Faqir Mohammad was demoted in 2012 after he held peace talks without the approval of the TTP leadership. All of this suggests low levels of trust placed in group members.
Reliability and Security of Communications	Low – The TTP perceives US drones to be constantly surveilling it. Therefore, they rely on oral communication or code.
Group Competency	High – The TTP is familiar with the environment in which it operates, some members have military training and IED knowledge. The organization has shown that it is capable of obtaining necessary intelligence and of organizing an attack quickly as was evidenced by the 2011 attack on a Pakistani Naval Base 20 days after the death of bin Laden.
Existential Threats	Low – Despite multiple threats to the lives of individual leaders, because the TTP controls FATA in addition to sections of Khyber Pakhtunkhwa (former NWFP), the leadership does not view the existential threat to be high at this point in time for the organization as a whole.
Preference for “Failure”	Fail Deadly – Based on the organization’s previous engagements and its ideological beliefs that it is fighting in Afghanistan as part of the “End Time” battles, it is likely that the organization would detonate a weapon despite a mishap in planning and would prefer a detonation to none at all.
Expert Estimated Nuclear C2	Assertive

The Star Children of Xenon ³⁵⁴	
Founding	1969
Ideology	Apocalyptic UFO cult Techno-fetishists (emphasize scientific method and advanced technologies)
Key Decision Makers	Thomas Edgerton – leader, founder
Constituents	Celebrities Wealthy people Xenons
Specialists	Genetic engineering Weapons delivery systems Legal Advanced technology Educated elite – psychology, creative writing, astronomy, metallurgy, biochemistry, microbiology, physics
Major Known Funding Sources	Wealthy members; investments in international financial markets; real estate equity; sale of SCX literature, fees for psychotherapy, addiction treatment and education; lawsuits; members' confiscated property
Existential Challenges	Government and private lobbyist crackdowns on “alternative religions”; Xenonian genocide of humans.
Tolerance for Uncertainty	Low – Control is an important aspect of AM cults, which means that there is little tolerance for uncertainty. Leaders are viewed as having divine authority, making it necessary that they be involved in key decisions to further reduce uncertainty.
Definition of Success	Specific Outcome – Because of megalomaniacal personalities, leaders expect to achieve a set of predetermined

³⁵⁴ This is a fictional organization based on real Apocalyptic Millenarian (AM) Cults such as the Raelians, Aum Shinrikyo, Jim Jones and others. The SCX is intended to show the overall behavioral and preference patterns of AM organizations writ large.

	objectives.
Flexibility in the Field	Low Importance – Leaders believe themselves to have divine guidance and therefore their own plans are the most likely to succeed. They also prefer to be in control and high flexibility would strip them of this control.
Perceptions of Previous Command and Control Outcomes	<p>Pre-determined (indeterminate) – No data to support AM cults’ use of pre-determined command and control structures.</p> <p>Assertive (success) – Due to the often hierarchical/authoritarian nature of Apocalyptic Millenarian cults, assertive command and control structures are perceived to be more successful by the leadership.</p> <p>Delegative (indeterminate) – This has not been favored for command and control in past operations because the leadership of AM cults is too highly centralized and too averse to uncertainty and flexibility to support this command and control structure.</p>
Complexity of getting weapon to target	High – Due to previous difficulties in weaponizing radiological, biological and nuclear weapons in the past (e.g., Aum’s failed attempts to use anthrax) and the need for relevant expertise, getting a weapon to its target is likely to be viewed as highly complex.
Trustworthiness of Relevant Group Members	Low – Leaders have an inflated sense of self and often underestimate the abilities and loyalties of members. Thus, they are not likely to trust their members.
Reliability and Security of Communications	Low – Due to high levels of paranoia and perceived external threats, the leaders have low confidence in the reliability and security of communications. They also fear internal collapse and lack the expertise to create networks secure enough to avoid leaks and to allow the leader to maintain control.
Group Competency	High – Leaders focus membership recruitment on those who are well-educated and wealthy, meaning that they tend to believe that their group is highly competent. The leaders’ inflated sense of self may also impact its perception of the group as highly competent.
Existential Threats	High – Leaders have high levels of paranoia and subscribe to conspiracy theories with regards to others’ attempts to destroy them. They may try to isolate followers in response to these perceived threats.
Preference for “Failure”	Fail Deadly – Because AM cults tend to view the outside world as being the enemy, a detonation at the wrong place, wrong time would be preferable to no detonation since the potential target base for the cult may be quite broad.
Expert Estimated Nuclear C2	Predetermined

Al-Qa'ida Senior Leadership (AQSL)	
Founding	Mid 1990s
Ideology	Islamist Anti-US/Anti-Israel
Key Decision Makers	Ayman al-Zawahiri – leader Khalid al-Husaynan – senior figure, religious matters Adam Gadahn – senior figure
Constituents	International mujahidin affiliates – Al Qaida in the Arabian Peninsula, Al-Qaida in the Magrheb, Pakistani militant groups Global Muslim Umma
Specialists	No specialists, training or knowledge with regards to nuclear weapons
Major Known Funding Sources	Individual donations; possibly Iran (weapons, training, funding) and North Korea
Existential Challenges	Targeted killing – Many key figures have been killed Security threats – Surveillance from Western countries and internal spies Need to maintain global image Risk of affiliate action tarnishing reputation
Tolerance for Uncertainty	Low – AQSL does not tolerate uncertainty because of security risks and surveillance. They are also keen to maintain their public image amongst affiliates and Islamic countries. As long as Zawahiri remains in control, the tolerance for uncertainty among the AQSL will likely continue to remain low.
Definition of Success	Specific Outcome – Because of concerns over public image as its popularity declines, fears of retaliation and a need to achieve a specific desired outcome to maintain relevancy as a terrorist organization, the AQSL prefers to have a predicted, specific outcome.

Flexibility in the Field	Low importance – Zawahiri would prefer that flexibility remain low in the field for fear that a mishap may further damage AQSL's waning popularity. As he shows a preference for low uncertainty, he would show a preference for low flexibility so as to minimize uncertainty.
Perceptions of Previous Command and Control Outcomes	<p>Pre-determined (success) – AQSL has experience with this command and control structure and has found extensive planning useful for minimizing uncertainty and risk. They also believe that the leadership would be better poised to make tactical, technical and procedural decisions.</p> <p>Assertive (indeterminate) – In the absence of knowledge of specific parameters, it is likely AQSL would view assertive as indeterminate.</p> <p>Delegative (failure) – Several mishaps when using this configuration and the risks that operatives may have inadequate training coupled with a need to ensure a specific outcome to promote group longevity make this command and control style likely to be viewed as unsuccessful by AQSL, at least in terms of conventional attacks.</p>
Complexity of getting weapon to target	High – AQSL would need to procure the nuclear weapon despite a lack of expertise in the field. They would then need to transport it to the US undetected and without it prematurely detonating in an Islamic country, which could damage their reputation in the terrorist community and strain relations with potential governmental allies.
Trustworthiness of Relevant Group Members	Low – Following the death of bin Laden, there is extreme paranoia that spies may have infiltrated the group.
Reliability and Security of Communications	Low – All electronic communication has been compromised and couriers can no longer be trusted following the death of bin Laden. They prefer to minimize mid-operation communications.
Group Competency	Low – AQSL does not see itself as competent with regards to developing nuclear weapons as it has never been able to do so in 20 years and has no known expert members in the field.
Existential Threats	Medium – AQSL fears not only US drone operations, but also the presence of internal spies. The more ideologically focused leaders are likely trying to find the transcendental impact that they will have for the global movement and in history.
Preference for “Failure”	Fail Deadly – While a premature detonation in an Islamic country would be incredibly bad for the group, overall, a detonation would be preferred to none at all, because it would send an important message that the group procured nuclear weapons and could do so again.
Expert Estimated Nuclear C2	Pre-determined

The Atlanta Five³⁵⁵	
Founding	2010
Ideology	Islamist/jihadist Anti-West/Anti-US
Key Decision Makers	Two Pakistani males in 20s, immigrated as children to US
Constituents	Western Muslims Supporters in Pakistani Taliban and al-Qaida
Specialists	No specialists, but members are culturally assimilated
Major Known Funding Sources	Minor backing from Al-Qaida Senior Leadership
Existential Challenges	Getting weapon from original location to US and target site without getting arrested. No training, technical or operational security skills.
Tolerance for Uncertainty	Medium – Because the cell has no training or special expertise, it will need to anticipate some uncertainty in an attack. Their target audience is broad, so they would be satisfied with any type of detonation so long as it did not lead to the mass killing of Muslims, suggesting uncertainty in targeting is largely tolerable.
Definition of Success	Suboptimal Outcome (Fizzle Yield) – The organization is concerned primarily with sending a message that instills fear in the US government and the public writ large. Given that homegrown terror cells are often compromised before they can carry out an attack, while acquiring and deploying the device, even if there was a fizzle yield and/or it was the wrong target or time, would be regarded as a success.
Flexibility in the Field	Low Importance – The leader of a small cell is likely to be ego-driven and prone to micromanaging. This is the leader's chance to prove himself a capable leader and to carry out an attack most cells cannot.
Perceptions of Previous Command and Control	Pre-determined (indeterminate) – No past experience or relevant models. Assertive (success) – Likely to perceive past assertive attacks as successes.

³⁵⁵ This is a semi-fictional organization meant to illustrate the behavioral and preference patterns of homegrown terrorist cells in the US.

Outcomes	Delegative (failure) – Aware of past cases of other attempts where delegative has failed.
Complexity of getting weapon to target	High – The group does not have a nuclear expert and so it would need to rely on a technical expert to arm the bomb at the pickup location or have the expert come with them to the detonation site. The most desirable targets would be highly urbanized such as DC or NYC, which have layers of security, further adding to the obstacles.
Trustworthiness of Relevant Group Members	High – The cell is small and members have been handpicked based on kinship or loyalty. Enough people have been arrested in the US on terrorist-related charges to dissuade those who are only passively interested from engaging in this kind of plotting.
Reliability and Security of Communications	Medium – There is probably both a high and low level of perception of reliability and security working at the same time. Therefore, the effective perception is probably in the middle.
Group Competency	Medium – As the attack date approaches, the leader may begin to question members' capability of carrying out such an attack, viewing them as being far from the trained mujahidin in other parts of the world.
Existential Threats	High – Because homegrown terror cells are almost always compromised before an attack, the leadership is likely to be very paranoid and to view threats of infiltration and arrest as very high.
Preference for "Failure"	Fail Deadly – Because the main goal of the organization is to instill fear and to show that its possible for a homegrown cell to carry out a violent attack, any detonation is better than no detonation.
Nuclear C&C	Assertive

Al-Qaida in the Arabian Peninsula (AQAP)	
Founding	2006
Ideology	Islamist/jihadist, Anti-West/Anti-Israel
Key Decision Makers	Abu Basir al-Wuhayshi – emir/leader Abu Muhammad al-Maqdisi – senior jihadist shaykh
Constituents	Saudi and Yemeni populations and governments Muslims worldwide
Specialists	Ibrahim al-Asiri – explosives expert
Major Known Funding Sources	Private donations; local and regional charities
Existential Challenges	Infiltration of organization from US and its allies Surveillance and targeted killing by the US
Tolerance for Uncertainty	High – The organization is known for and has a history of taking big risks despite the fact that it has recently had its plots compromised after Saudi intelligence foiled the latest underwear bombing attack. Tolerance for uncertainty has increased as the leadership’s confidence has been bolstered by successes on a local level. AQAP is also willing to take on risk if it means making a big statement, as the organization is interested in taking on the mantle of the AQSL as the vanguard of global jihad, should it collapse.
Definition of Success	Suboptimal Outcome (Target/Timing) – The detonation of the device is the most important aspect of the group’s mission and would be viewed as a success, lending the organization credibility, so long as a nuclear bomb did not detonate in an Islamic country. Furthermore, the organization’s media has been highly effective in spinning attacks as successful even when the primary goal was not achieved, such as with the failed assassination of the Saudi Prince (the operative was able to get close to the Prince and detonate the bomb although it did not kill the intended target).
Flexibility in the Field	Low Importance – There is no evidence to suggest that AQAP leadership attaches any particular importance to flexibility in the field.
Perceptions of Previous Command and Control	Pre-determined (indeterminate) – The organization has had both successes (2009 Mutallab midair bomb attempt) and failures (2009 Saudi Prince assassination, 2012 underwear bomb plot) with pre-determined command and control structures. Because it is difficult to know exactly which variables may have led to the failures, the

Outcomes	<p>leadership may be unsure whether pre-determined command and control structures would lead to more successes or not.</p> <p>Assertive (indeterminate) – The assertive command and control style is out of the realm of historical behaviors for the AQAP.</p> <p>Delegative (indeterminate) – While the leaders have given their operatives flexibility during the missions in the past, there is just simply not enough known information to make a judgment about whether the leadership would view delegative command and control structures as successful or not.</p>
Complexity of getting weapon to target	High – The organization had two known American members who could have supplied AQAP with necessary strategic and tactical information about the American context. However, both were killed, thus adding an obstacle to carrying out an attack on a US target. There would also be significant security and logistical obstacles in transporting a nuclear device to the US if constructed abroad, as well as the obstacles of adequate training of members so that they could carry out an attack far from the group's home base.
Trustworthiness of Relevant Group Members	Medium-Low – Although AQAP has had its operations recently compromised, it also has a strong counter-intelligence organization to help identify potential spies. While the possibility of spies being in its ranks is very real, AQAP also has a dedicated cadre of operatives that it has vetted and in which the leadership must place some trust given that the group often takes big risks and allows for flexibility in the field as long as a detonation occurs.
Reliability and Security of Communications	High – The leadership probably believes that its encryption communication is secure and will rely on this system as much as its needs to in order to ensure some level of connectivity.
Group Competency	High – AQAP has an explosives specialist and it believes its members to be well-trained. Because the leadership envisions AQAP taking on the lead Al-Qaida role following the collapse of AQSL, the leaders would not take on violent operations if they did not believe themselves to be capable of executing the plans.
Existential Threats	High – The US has been focusing its resources on the organization and retaliation is a real and serious threat for AQAP. The Saudi Arabian government has been working with the US and has successfully infiltrated the group, adding to the group's list of existential threats.
Preference for "Failure"	Fail Deadly – For AQAP, a detonation is necessary even if it targets the wrong entity at the wrong time. A fizzle could damage its international reputation at a time where the leadership hopes to replace the AQSL and it could reduce the number of financial donations it receives.
Nuclear C&C	Pre-determined/Delegative

Summary and Results

The Terrorist Nuclear Command and Control project sought answers to the following question:

How would violent non-state actors implement command and control (C2) over a single nuclear weapon or a nascent nuclear arsenal?

This question was expounded upon in this report's introductory remarks, as follows:

Would the leaders of a nuclear-armed non-state group, fearful of their own “decapitation,” i.e. being cut-off from their nuclear weapons by US preemption or retaliation, predelegate nuclear storage, transportation and employment authority to widely dispersed subordinates? Or, in contrast, would the leaders of nuclear-armed VNSAs, mindful of internecine struggles and, consequently, fearful of being blackmailed or destroyed by their own weapons, limit the authority to store, move and employ their nuclear weapons only to themselves and, possibly, a small trusted coterie? Answers to such questions are of vital importance. For example, if the US preempted or retaliated against leadership centers of nuclear-armed non-state actors employing a predelegative command and control structure, the response could easily be (another) disastrous nuclear event against the US or its territories abroad. In contrast, if preempting or retaliating against terrorists using a nondelegative command and control system, the United States might safely eliminate nuclear threats from the group with attacks on leadership centers.

This project has addressed its overarching objective by demonstrating that VNSAs can adopt a variety of often complex configurations in their delivery of nuclear devices against the United States. These can broadly be categorized into three main choices: 1) leaders of a nuclear-armed non-state group could choose to pre-delegate responsibilities for deployment and detonation to subordinates (a *delegative* configuration); 2) leaders could put into motion a set of pre-determined actions that, once initiated, could not be altered (a *predetermined* configuration) or 3) leaders could retain all key decisions within their hands, or that of a select commander, and direct operations from a base that is remote from the area of operations (an *assertive* configuration). Each configuration, if known to U.S. leaders, necessitates different responses for pre-emption, retaliation, or both, in order to safely eliminate imminent nuclear threats or prevent subsequent nuclear attacks.

Beyond the information and insights presented throughout the report, Task 3's principle contribution is a novel model (see [here](#) [PDF]) of the command and control decision process, which forms the basis for a threat assessment tool that can be used to forecast the most likely configuration to be selected by a candidate VNSA. However, while the model's initial applications are promising and certainly serve as the basis for further work in this area, it is the sum total of all of the project's elements that informed the model and that are needed to achieve an understanding of VNSA nuclear command and control writ large. Thus, project researchers conclude this report with brief reviews of salient findings, highlighting their respective impact on the model's formulation.

Because the dependent variable of the project was VNSA nuclear C2 configuration, project researchers assessed a wide range of areas as a means to compile as many independent variable candidates as possible—variables that could, after thorough analysis, emerge as germane to answering the project's central question. The four broad areas and methods utilized in the conceptualization and specific identification of potentially useful variables were:

1. A literature review consisting of three areas: A) the general concepts of organizational C2, B) state nuclear C2, and C) VNSA (non-nuclear) operational C2 in a variety of contexts;
2. A subject matter expert elicitation;
3. Model development and finalization: an iterative process of considering, filtering and aggregating previously identified candidate variables to select the most salient (primary) decision factors and

contributing (secondary) factors, as well as the relationships between them. The final model, consisting of ten primary factors, was then instantiated in both qualitative and quantitative forms, and represented graphically.

4. Application: The final model was applied, both qualitatively and quantitatively to six VNSA profiles, the results of which are discussed below.

I. Literature Review

One striking element of the literature review was the similarity of challenges that all organizations face with “extension of authority over distance.” Indeed, the literature demonstrates that command and control can be dissected broadly into analyses of the flexibility or stability of the organization’s distribution of power structures, perception of loyalty of their members, and, among other factors, the stability of the organization’s internal or external environment.

A. Organizational Studies

The concepts and practices of command and control reflect the demand for dominion and delegation. Principle concepts of organizational studies are highly useful in this regard; they inform the extension and balance of authority and delegation in terms of intentions, communication and outcomes. Both state actors and VNSAs, obviously composed of a multitude of independent units, ideally function as a whole organism against external challenges. Hence, the knowledge of a group’s core culture allows researchers access to its likely development of hierarchy, delegation of authority, and potential organizational reaction to crises. Although open source materials on state nuclear command and control are scarce and VNSAs historically have not possessed nuclear weapons, behavior-informed models of national and sub-state organizational culture can shed light on the power distance between leaders and their operatives, as well as the level of uncertainty avoidance for both groups.

Specifically, with regard to organizational studies and nuclear command and control, four key frameworks are notable:

a. Social Psychology and Organizations

Social psychology provides for an understanding of the underlying assumptions and membership criteria of an organization and, among other key insights, an understanding of the organizational stage in which the organization operates. This allows analysts to predict how a group is likely to react, develop hierarchy, and delegate authority in order to align with their organizational culture.

Conceptual contributions to the final model included:

- Tolerance for uncertainty
- Importance to leader of flexibility in the field
- Perceived trustworthiness
- Perception of existential threat

b. The Competing Values Framework

Organizational culture under this framework is found by determining what is valued by a particular group or organization. In this field of study, “values” are manifest in such ways as: dominant leadership styles, language and symbols, procedures and routines, and definitions of success. The organizational models resulting from this framework identify types of organizational cultures, define factors contributing to organization success, and determine what traits make for effective leaders.

Conceptual contributions to the final model included:

- Tolerance for uncertainty
- Importance to leader of flexibility in the field

- Preferences for what constitutes success
- Preference for type of failure

c. Organizational Structures and Control

Two areas were explored: *configurational organization perspectives*, which decompose the overall objectives of an organization into subtasks performed by members and their integration into the overall organizational performance; and *coactivational organization perspectives*, whereby it is possible to ascertain why decisions and decision rules are what they are. Three principle areas studied in terms of the latter:

- I. The decision rules of organization members
- II. Constraints to resource and information flow
- III. Exchanges between the organization and its environment

- Include Conceptual contributions to the final model included: Tolerance for uncertainty
- Importance to leader of flexibility in the field
- Previous conceptions of command and control
- Perception of reliability and security of communications

d. Mintzberg's Typology of Five

As noted in the body of this report, Mintzberg's five basic parts are potentially useful for categorizing organizations vis-à-vis determining how they hold and distribute power, make decisions, and are likely to act in a given scenario. The five types and their usefulness in assessing a given VNSAs nuclear C2 are:

1. Simple structure: Highly centralized, minimal training of members, limited planning mechanisms, and few communication tools. Note that young organizations and those in hostile environments tend to use simple structures as they are informal, have few rules, and are very adaptable.
 - Conceptual contributions to the final model included: Tolerance for uncertainty
 - Importance to leader of flexibility in the field
 - Perceived trustworthiness
 - Perception of reliability and security of communications
 - Perceived competency
2. Machine bureaucracy: Rules and regulations—an obsession with control—permeate the entire structure. As Mintzberg explains, “formal communication is favored at all levels; decision-making tends to follow the formal chain of authority. Only at the strategic apex are the different functional responsibilities brought together; therefore, only at this level can the major decisions be made, hence the centralization of the structure in the vertical dimension.”³⁵⁶
 - Conceptual contributions to the final model included: Tolerance for uncertainty
 - Preferences for what constitutes success
 - Importance to leader of flexibility in the field
 - Perceived trustworthiness
 - Perceived competency
 - Preference for type of failure

³⁵⁶ Mintzberg, “Structure in 5's, p. 330.

3. Professional bureaucracy: Highly decentralized, professional members of the organization have control both over their own work and over the central administration. Professionals can independently make major decisions regarding their own work and may be given authority to contribute to organizational-level decisions.³⁵⁷
 - Conceptual contributions to the final model included: Tolerance for uncertainty
 - Preferences for what constitutes success
 - Importance to leader of flexibility in the field
 - Previous perception(s) of command and control
 - Preference for type of failure
4. Divisionalized form: The superimposition of one organizational form atop other divisions, where separate divisions exhibit little interdependence. Such organizations exhibit limited vertical decentralization and division leaders have significant control over operations and the implementation of goals and processes
 - Conceptual contributions to the final model included: Tolerance for uncertainty
 - Preferences for what constitutes success
 - Importance to leader of flexibility in the field
 - Previous perception(s) of command and control
 - Perceived trustworthiness
 - Perceived competency
 - Preference for type of failure
5. Adhocracy: The basic organizing principle of adhocracy is mutual adjustment. Featuring selective decentralization, these organizations depend upon *liaison* devices to encourage mutual adjustment within and between groups, which are semi-autonomous and operate with almost full command and control within their individual units. With an opaque distinction between members and core administrators, strategy is not a top-down function, but rather a result of ad hoc decisions made at the project level. Of all organization types, adhocracies have the most dispersed and flexible control structure.
 - Conceptual contributions to the final model included: Tolerance for uncertainty
 - Preferences for what constitutes success
 - Importance to leader of flexibility in the field
 - Previous perception(s) of command and control
 - Perceived trustworthiness
 - Perception of reliability and security of communications
 - Perceived competency
 - Preference for type of failure

In short, the study of organizations reveals how the universal and often inexorable dilemmas inherent in command and control are addressed in a variety of organizational types. Organizational studies reveal prominent factors effecting *how* command and control is actualized in a vast array of organizations. Significantly, such studies reveal that non-state *and* state actors face the same principle challenges with command and control.

³⁵⁷ Ibid, p. 334.

B. State Nuclear Command and Control Configurations

States seek to maintain political control over the use of nuclear forces. By doing so they seek to most effectively deter opponents' first strike, deter conventional attacks (especially if opponents' possess a conventional military advantage), and maintain the ability to deliver nuclear weapons in the case of failed deterrence and the need for retaliation. Thus, states are committed to the principles assuring that nuclear weapons are always available for use but are never used without authorization (the always/never dilemma). The nature of this authorization depends on the C2 configuration being assertive, or delegative. Planning mechanisms can be highly centralized, led by a professional bureaucracy, with mechanisms for decision coordination. In such cases, constraints to internal information flows and resources are crucial factors for understanding state nuclear command and control. In contrast, relatively decentralized strategies are known to have existed when states perceived that they were vulnerable to nuclear decapitation and thus adopted an assured response capability, which is often characterized as worrisome due to its weakening of deterrence.

The literature writ large emphasizes the two key variables determining state nuclear C2 as: 1) perceptions of time urgency, and 2) stability of civil-military relations. However, four other independent variables have also been identified:

- **Arsenal Size and Dispersal:** Assertive control lessens and delegative control increases as a state's nuclear arsenal grows in size and dispersal.
- **Perceived Vulnerability:** Two discrete and opposing outcomes can result. First, delegative control measures can increase with increased threat perception. Second, a heightened crisis environment will precipitate increased civilian interest in nuclear command and control and, consequently, there will be a shift toward greater assertive control.
- **Leadership Style:** Administrative style elsewhere, some contend, is echoed in nuclear operations; "thus, changes in administration will precede and precipitate shifts in assertive and delegative control."³⁵⁸
- **Organizational Constraints:** Enhanced nuclear use-control technologies (e.g., permissive access links or PALS) allow for or greater assertive control and are likely to lead to greater reliance on assertive control.

Conceptual contributions to the final model included:

- Perception of existential threat

C. VNSA Conventional Command and Control

The terrorist events evaluated point to the conclusion that groups with strict hierarchy and adherence to orders from hardline leadership tend to have either pre-determined or assertive C2, and are unlikely to have a delegative system. In rigidly-hierarchical groups, a unified leadership compartmentalizes the specific agenda for each subgroup such as columns and cells, while maintaining direct control over major decisions and actions. In contrast, delegative configurations dominate when leadership perceives, among other key factors, omnipresent and existential threats.

Conceptual contributions to the final model included:

- Perception of existential threat
- Perceived complexity of getting weapon to target
- Tolerance for uncertainty
- Importance to leader of flexibility in the field
- Perceived trustworthiness
- Perception of reliability and security of communications

³⁵⁸ Feaver, *Guarding the Guardians*, p. 80.

- Perceived competency

In sum, the literature review clearly demonstrates that clues to how nuclear-armed VNSAs would configure their command and control exist in the intrinsic nature of human organizations. Regardless of goals, size, or location, all organizations must address the extension of authority over distance. Just as VNSAs are akin to other organizations in this way, so too are future nuclear-armed VNSAs likely subject to the many of the same critical dilemmas that all nuclear states face. Namely, the delicate balance of leadership control over the weapon while simultaneously not rendering the weapon unusable with the leadership's destruction—in short, avoiding the perils of nuclear decapitation. Indeed, leaders of nuclear-armed groups likely see security in their weapon but only if their state opponents suspect that the leader's destruction will still lead to the weapon's use. The ideas of deterrence are just as germane in this case of non-state actors as they were with the Superpowers.

II. Subject Matter Expert Elicitation

The literature review resulted in over fifty potential candidate variables, with little indication of which were the most salient in the context of VNSA nuclear C2. In order to supplement these factors and begin the process of prioritizing variables, researchers developed and conducted an elicitation involving ten subject matter experts in a variety of domains, including counterterrorism operations, nuclear weapons employment policy, organizational psychology and terrorist decision-making. The primary goal of the elicitation was to validate, where necessary to supplement and to prioritize the previously developed framework for nuclear command and control formulated as part of the broader project. It accomplished this:

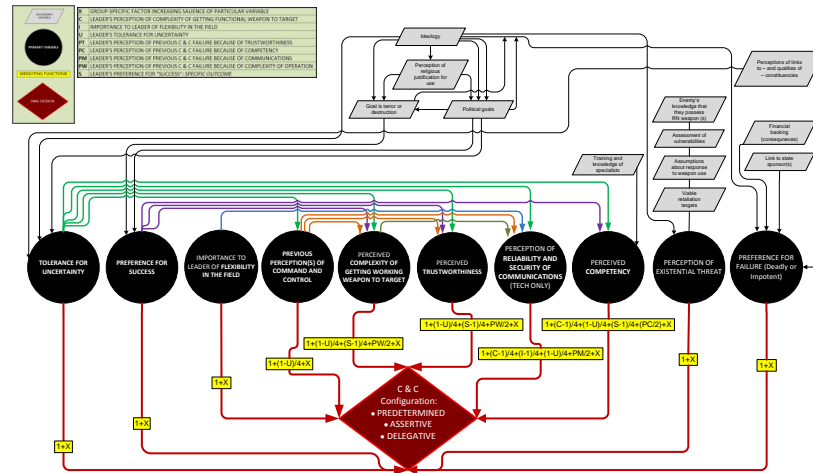
- *Implicitly*, by eliciting salient variables and the interactions between these variables, so that these could be compared with the influencing factors that emerged from the literature reviews.
- *Explicitly*, by creating one or more alternative frameworks and then evaluating these alternatives against the previously developed framework.

III. Finalization of model

Finalizing the model involved:

1. Consolidating the various models that emerged from the literature review and the elicitation, as well as identifying the primary and secondary factors likely to drive C2 in order to achieve as much parsimony as possible. Where this was possible, the project team sought to explain the theoretical and historical variances in C2 outcomes—whether predetermined, assertive or delegative—favored by different values of each factor. Finally, the team assessed the multiple interactions between factors.
2. Generation of a graphical representation of the final model.
3. Development of a matrix of how each of the ten primary factors *acting independently* would be likely to affect the nuclear command and control configurations.
4. Remaining mindful that a simple combination of the ten primary variables in an unweighted estimate would fail to take into account the salience of each primary variable or the interactions between variables. Hence, project researchers developed different weighting functions for the values of the ten primary factors and a contingency weighting term for higher or lower salience in a particular instance.
5. Conversion of all factors into creating a set of clear instructions to model a particular VNSA's nuclear command and control, and generating total weighed final scores that reflect both the rank and the likelihood of outcomes for each factor.

Figure 14: Final Model



The project created a sophisticated yet functional model. With proper data input, it serves as a tool for determining the likely command and control configuration of extant or fictional VNSAs.

IV. Model Application

The final section of Task 3 project consisted of the application of the model by subject matter experts to six VNSA profiles:

1. Al Qaida Senior Leadership (AQSL)
2. Al Qaida Homegrown US Cell (semi-fictional)
3. Al Qaida in the Arabian Peninsula (AQAP)
4. Tehrik-e-Taliban Pakistan (TTP): Movement of the Pakistani Taliban
5. The Star Children of Xenon (semi fictional): Apocalyptic Millenarian Cult
6. U.S. Right-wing Extremist Group (semi-fictional)

Each profile was divided into:

1. Pre-analysis, consisting of the general background, ideology, key decision-makers and constituents of the group, and
2. Factor analysis, a thorough exploration of each of the final model's ten factors as they intersect with a given VNSA.

Each profile author supplied assessments of the values for each of the ten primary factors, as well as their final estimate on the likely C2 configuration for the VNSA studied. The project team then utilized the factor values as inputs into the computational version of the model, to produce a model C2 configuration estimate, which was compared with the final qualitative estimates of the authors as a preliminary validation.

Results

Table 13 provides a listing of the outcomes of the application of the model to the six VNSAs analyzed.

Table 13: Final Model

FACTOR VALUES: WEIGHED MODEL AND SIX VNSA							
FACTOR NUMBER	FACTOR ¹	AQSL	AQ Cell	AQAP	AM	TTP	RW
F1	Tolerance for Uncertainty	Low	Medium (more important)	High (more important)	Low (more important)	Low	Medium
F2	Preference of Success	Specific outcome	Suboptimal Outcome: Even fizzle	Suboptimal: Target/Timing	Specific outcome (more important)	Suboptimal outcome: Target/timing	Suboptimal outcome: Target/Timing
F3	Flexibility in the Field	Low	Low	Low	Low (more important)	Medium	High
F4	Previous C2 ²	P: Success A: Indeterminate D: Failure	P: Indeterminate A: Success D: Failure	P: Indeterminate A: Indeterminate D: Indeterminate	P: Indeterminate A: Success D: Indeterminate	P: Indeterminate A: Success D: Indeterminate	P: Indeterminate A: success D: Success
F5	Complexity of Targeting*	High	High	High	High	High	Low
F6	Trustworthiness*	Low	High	Medium-Low	Low (more important?)	Low	Medium
F7	Communications*	Low	Medium	High	Low	Low	High
F8	Group Competency*	Low	Medium	High	High (more important)	High	High
F9	Existential Threat*	Medium	High	High	High (more important)	Low	High
F10	Preference for Failure	Deadly	Deadly	Deadly	Deadly	Deadly	Deadly
		OUTCOME:	OUTCOME:	OUTCOME:	OUTCOME:	OUTCOME:	OUTCOME:
Groups:		Al Qaida Senior Leadership	Al Qaida U.S. Cell*	Al-Qaida in the Arabian Peninsula	Apocalyptic Millenarian Cult*	TTP: Tehrik-e-Taliban Pakistan	U.S. Right-Wing Extremist ³
Author's Estimation:		Predetermined	Assertive	Predetermined / Delegative	Predetermined	Assertive	Delegative
Model (Unweighted):		Predetermined	Predetermined	Delegative (but close to others)	Predetermined	Assertive	Delegative
Model (Weighted):		Predetermined	Predetermined	Delegative	Predetermined	Predetermined (but close to Assertive)	Delegative

¹ Factors with a * symbol indicate that leadership's *perception* of particular factor is paramount

² Leadership's perception of outcomes to previous C2 configurations – whether it be their group, other groups or a general perception. Perceptions are of predetermined, assertive and delegative configurations.

³ Semi-Fictitious U.S. Right-Wing Anti-Government Extremist.

* Groups with a * symbol are notional yet based on extant and past groups, individuals and events.

There was consensus between the qualitative assessments and the model with respect to the apocalyptic millenarian cult (predetermined), right-wing extremist group (delegative), and al-Qaida Senior Leadership (predetermined). The model also agreed with the expert estimate for AQAP (delegative), although the author also believed that predetermined was a viable configuration in that case. The only discrepancies were the semi-fictional home-grown AQ-related cell, where the author estimated an assertive configuration, while the model predicted a predetermined configuration and the TTP, where the expert assessed an assertive configuration, and the weighted model predicted predetermined, although in the latter case the unweighted model outputted assertive and the assertive score was appreciably close to the predetermined score in the model.

While it is, fortunately, impossible to validate the model empirically in light of the absence of any actual cases of VNSA acquisition of nuclear weapons, the general concordance of the model with expert estimates gives some *prima facie* or surface validity to the model,³⁵⁹ and justifies using it as the basis for future

³⁵⁹ It should be noted that, where discrepancies between the model and the experts exist, this does not necessarily imply that the model is incorrect – the model may in fact be detecting and taking into account factors missed by the experts.

research in this area. The profiles also provide, to the best of the researchers' knowledge, the first in-depth exploration of command and control issues for several of the VNSAs and thus might be useful in and of themselves in analyzing the potential future behavior of these VNSAs in even a non-nuclear context. Although this study is only an initial step in resolving the central questions posed by this study, it constitutes a significant and practical step forward in understanding how VNSAs might configure their nuclear weapons C2 at an operational level. It is genuinely hoped that the US is never faced with a nuclear-armed non-state adversary, but if this eventuality were to arise, the VNSA Nuclear C2 Model and assessment tool developed here, together with the analysis of past VNSA C2 behavior and state nuclear weapons employment policies, may provide security officials and policymakers with much-needed insight in a time of unprecedented national crisis.

Appendix 1: Elicitation Participant Biographies

Charles “Sam” Faddis served twenty years in the Central Intelligence Agency as an Operations Officer. He was the Department Chief of the CIA's counterterrorist center where he supervised a staff of over one hundred analysts, targeteers, legal staff, etc. He has held leadership roles throughout the CIA in the Middle East, South Asia, Southwest Asia, and Europe. After receiving his BA from Johns Hopkins University and his JD from University of Maryland School of Law, he served as a Lieutenant in the United States Army and practiced in courts martial, state circuit court, federal district court, and the Ninth Circuit Court of Appeals.

Peter Feaver, who received a Ph.D. from Harvard in 1990, is a professor of political science and public policy and Bass Fellow at Duke University, as well as director of the Triangle Institute for Security Studies and the Duke Program in American Grand Strategy. He is coeditor of *Shadow Government*. Feaver was special advisor for strategic planning and institutional reform on the National Security Council staff at the White House from 2005-2007. From 1993-1994, Feaver served as director for defense policy and arms control on the National Security Council at the White House, where his responsibilities included the national security strategy review, counterproliferation policy, regional nuclear arms control, and other defense policy issues. He is a member of the Aspen Strategy Group and comoderates with Bill Arkin on *Planet War*, a discussion board on Washingtonpost.com. In addition to numerous scholarly articles and policy pieces on American foreign policy, nuclear proliferation, information warfare, and US national security, Feaver is also author of *Armed Servants: Agency, Oversight, and Civil-Military Relations* (Harvard Press, 2003), and most recently, with Christopher Gelpi and Jason Reifler, a coauthor of *Paying the Human Costs of War* (Princeton University Press, 2009).

Charles D. Ferguson is the Philip D. Reed senior fellow for science and technology at the Council on Foreign Relations (CFR). He is also an adjunct professor in the security studies program at Georgetown University, where he teaches a graduate-level course titled “Nuclear Technologies and Security,” and an adjunct lecturer in the national security studies program at the Johns Hopkins University, where he teaches a graduate-level course titled “Weapons of Mass Destruction Technologies.” His areas of expertise include arms control, climate change, energy policy, and nuclear and radiological terrorism. At CFR, he specializes in analyzing nuclear energy, nuclear nonproliferation, and the prevention of nuclear terrorism.

Prior to arriving at CFR in September 2004, Dr. Ferguson worked as the scientist-in-residence at the Monterey Institute's Center for Nonproliferation Studies (CNS). At CNS, he co-authored (with William Potter) the book *The Four Faces of Nuclear Terrorism* (Routledge, 2005). He was also the lead author of the award-winning report *Commercial Radioactive Sources: Surveying the Security Risks*, which was published in January 2003 and was one of the first post-9/11 reports to assess the radiological dispersal device, or “dirty bomb,” threat. This report won the 2003 Robert S. Landauer Lecture Award from the Health Physics Society.

Dr. Ferguson has consulted with Sandia National Laboratories and the National Nuclear Security Administration. He served as a physical scientist in the Office of the Senior Coordinator for Nuclear Safety at the US Department of State, where he helped develop US government policies on nuclear safety and security issues. He has also worked on nuclear proliferation and arms control issues as a senior research analyst and director of the nuclear policy project at the Federation of American Scientists. After graduating with distinction from the United States Naval Academy, he served as an officer on a fleet ballistic missile submarine and studied nuclear engineering at the Naval Nuclear Power School.

Renée Hood, Esq. received her J.D. from University of Maryland School of Law in 2009 and is a Member of the Maryland State Bar. She has served as the Executive Articles Editor of the University of Maryland Law Journal of Race, Religion, Gender and Class from 2008 to 2009, Associate Articles Editor from 2007 to 2008, and was a Staff Member from 2006 to 2007. Prior to obtaining her law degree, she earned her Bachelor of Science degree in Family Studies from the University of Maryland at College Park in 2004.

Frank Hopper has dedicated most of his life to computer programming and gaming. Writing his first BASIC program at the age of six, Hopper's skills continued to develop through high school, culminating in the opportunity to assist Richard Woolcock, developer of GodWars, with the design of GodWars II. A Certified Web Master from the USDA Graduate School in December 2000, and currently working toward a Bachelor's in Computer Science from the University of Maryland, Baltimore County, Hopper has employed his skills in a number of industries, including Real Estate and the medical industry, to further his development as a programmer. Currently working as a consultant for Climbito350.com, Hopper consults on new technologies, advertising strategies, as well as website dynamics. With well over twenty years of gaming experience, Hopper has come to learn the essentials of leadership, group dynamics and psychology, and remote human interaction. With extensive experience with different gaming systems and game designs, Hopper has built a substantial repertoire of knowledge and skills of design, mechanics, and player psychology that he continues to expand today.

Brian A. Jackson is a Senior Physical Scientist and currently serves as the Associate Director of RAND's Homeland Security research program. Brian holds a Ph.D. in bioinorganic chemistry from the California Institute of Technology and a Master's degree from George Washington University in Science, Technology, and Public Policy. Dr. Jackson's research focuses on homeland security and terrorism preparedness. Areas of examination have included safety management in large-scale emergency response operations, the equipment and technology needs of emergency responders, and design of preparedness exercises. His terrorism-focused research has examined organizational learning by terrorist groups, terrorist groups' use of technology, development of assessment methods for novel terrorist threats, and examination of the strategies to respond to terrorist targeting of national economies. Key publications include articles in *Studies in Conflict and Terrorism*, *Military Review*, and *Biosecurity and Bioterrorism* on terrorist organizational structures and behavior, intelligence gathering for targeting terrorist and insurgent groups, and analysis of a state-level public health preparedness exercise, as well as the RAND reports *Aptitude for Destruction*, Volumes 1 & 2, *Breaching the Fortress Wall: Understanding Terrorist Efforts to Overcome Defensive Technologies*, and Volumes 1 and 3 of the RAND *Protecting Emergency Responders* series of publications.

Paul Muchinsky received his B.A. degree in psychology from Gettysburg College, his M.S. degree in psychology from Kansas State University, and his Ph.D. in Industrial/Organizational Psychology from Purdue University. He was a faculty member of Iowa State University for twenty years. In 1993 he was appointed the Joseph M. Bryan Distinguished Professor of Business at The University of North Carolina at Greensboro. In 2004, Dr. Muchinsky was the recipient of the inaugural Distinguished Teaching Award from the Society for Industrial and Organizational Psychology for his outstanding educational contributions to the field. Throughout his career, Dr. Muchinsky has been very active in a wide range of professional activities within the field of industrial/organizational psychology.

Peter Neumann is the Director of the International Centre for the Study of Radicalisation and Political Violence at King's College London. Prior to this appointment, he was Director of the Centre for Defence Studies (2005-2007) at King's College London, and Content Director of the International Summit on Democracy, Terrorism and Security (2004-2005) organized by the Club de Madrid, the association of former Presidents and Prime Ministers. He has authored numerous articles on terrorism and radicalization in journals like *Survival*, *Foreign Affairs*, *Orbis*, and *Terrorism and Political Violence*. Opinion pieces and shorter analysis have appeared in the *New York Times*, *The International Herald Tribune*, *Prospect* and other magazines and newspapers. He frequently appears on radio and television as an expert on terrorism and political violence. Dr. Neumann is a senior lecturer in War Studies at King's College London and teaches classes on terrorism, insurgency, radicalization, and intelligence. He is Co-Director of the newly created Master's Programme in Terrorism, Security and Society. Additionally, he is a member of the Club de Madrid's expert advisory council, as well as of the editorial boards of the journals *Studies in Conflict and Terrorism* and *Democracy and Security*. He is an Affiliate of the European Commission's European Network of Experts on Radicalisation, serves as a member of the German Federal Criminal Office's (BKA) European Expert Network on Terrorism Issues, and is associated with several other institutions and think-tanks.

Mike Tierney received a B.A. from William and Mary in 1987 and a Ph.D. from the University of California at San Diego in 2003. He teaches courses on international relations, international organization, and research methods. He has published two books: *Greening Aid? Understanding the Environmental Impact of Development Assistance*, Oxford University Press, 2008 and *Delegation and Agency in International Organizations*, Cambridge University Press, 2006. Professor Tierney has published articles in a variety of journals including *International Organization*, *Review of International Political Economy*, *Foreign Policy*, *Journal of IR and Development*, *Politics and Gender*, *Environment*, *International Studies Perspectives*, *Law and Contemporary Problems*, and *International Journal*. He is currently working on two books. The first applies principal-agent theory to explain institutional reform and behavior within multilateral institutions. The second is an edited volume that explores the utility of synthesizing rationalist and constructivist approaches to the study of international relations.

James J. Wirtz is the Dean of the School of International Graduate Studies (SIGS), and a Professor in the Department of National Security Affairs (NSA) at the Naval Postgraduate School (NPS) in Monterey, California. He is the editor of the Palgrave Macmillan series, *Initiatives in Strategic Studies: Issues and Policies* and section chair of the Intelligence Studies Section of the International Studies Association. He joined NPS in 1990 after teaching at Franklin & Marshall College, Penn State University and the State University of New York, Binghamton. Between January 2000 and January 2005 he served as the Chair of NSA. He is a past president of the International Security and Arms Control Section of the American Political Science Association. In 2005, he was a Visiting Professor at the Center for International Security and Cooperation, Stanford University. He has authored and co-authored a plethora of books and journal articles relating to intelligence and war strategy. He teaches courses on nuclear strategy, international relations theory, and intelligence. Dean Wirtz is currently working on a monograph, entitled *Theory of Surprise* and edited volumes on complex deterrence, intelligence for homeland security, and the future of proliferation. A native of New Jersey, he earned his degrees in Political Science from Columbia University (MPhil 1987, Ph.D. 1989), and the University of Delaware (MA 1983, BA 1980). In 1985-86 he was a John M. Olin Pre-Doctoral Fellow at the Center for International Affairs, Harvard University.

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Appendix 2: Elicitation Script

NK C&C Elicitation Script

Day 1: Sunday, January 23, 2011

Time	Session Number	Session Title	Session Goals	Session Details	Facilitator	Participants	Roles John Sawyer	Charles Blair	Daniel Murphy	Lauren Pinson
Sunday, January 23										
1:30		Staff Arrival	Preparations and Equipment Checks	Staff arrive; check audiovisual equipment and inventory elicitation supplies.	Checks master inventory	N/A	Checks equipment.	Checks materials.	Preparations and checks of note-taking equipment.	Responsible for background music.
1:30-10:00	1.0	Arrival and registration	Assemble participants for on-time start; create relaxed, isolated atmosphere.	Participants will be registered, given name-tags and materials package and shown to their places. Breakfast will be available. Instrumental classical music in background.	Informal introductions, verifying that participants are present or on their way.	Leave outside world behind; get comfortable; imbibe necessary quantities of food and caffeine.	Keep track of missing participants; any participants not present by 9:45 am should be contacted by phone.		Registration	Registration
9:00 - 10:30	1.1	Introduction	Welcome and introduce participants; break the ice; convey administrative information	General welcome (5 mins)	Introduces himself; Welcomes participants and thanks for making the time to contribute to improving national ability to assess threats; why we are here – select group of diverse, exceptional individuals to explore a pressing topic		Prepare to give introduction		Prepare to take notes.	Prepare to take notes.
				Introductions and ice breaker (15 mins)	Manages participant and observer introductions.	Provide brief introductions about themselves: provide name, organization, role in the organization, and one little known fact about themselves.			Record "little known fact" for each participant.	
				Admin info & Questions (10 mins)	Answers any initial questions about elicitation process; discusses sensitivity of information; stressing the importance of discretion in using or distributing the ideas generated during the workshop; admin information (workshops, etc.).		Explains expense reporting, reimbursement process, etc.		Captures questions and answers.	Captures questions and answers.
9:30 - 11:00	1.2	Motivating Participants	Embed importance of workshop in participant mental frames; "prime" participants for elicitation with breakout scenario; Build strong goal-driven work ethic.	Purpose of Elicitation (8 mins)	Discuss specific purpose of the elicitation: to generate relevant variables and assess certain relationships (3 mins).			Describe general project (5 mins)		
				Breakout scenario (10 mins)	Guide participants through breakout scenario.	Complete script.	Scenario actor	Scenario actor	Scenario actor	Collect participant feedback.
				Scenario 3: Rad (15 mins)	Instructs and assists.	Develops in-role C&C structure according to provided scenario.	Instructs and assists.	Instructs and assists.		
				Presentation (25 mins)	Facilitates in-role presentations.	Each team presents scenarios in role.			Captures presentations.	Captures presentations.
				Discussion (5 mins)	Facilitates discussion on whether in-role perspective yields any new insights, especially on interrelationships between factors.				Captures discussion.	Participant observation.
17:25 - 17:30	1.3	Wrap-up Day 1		Discussion (5 mins)	Brief overview of what we have accomplished; teaser for next day.				Captures discussion.	
17:30 - 18:30		Adjourn Staff Refresh							Backup files	Backup files
10:30 - 10:45		Break		Writing up (15 mins)	Participants are instructed to now write down their stories in as much detail as possible, either forwards or in reverse (taking into account any additions they may want to make after listening to the other stories and answering questions about their own story).	Each participant can individually modify his story, and submit by e-mail or hardcopy to facilitator.			Collate stories.	
10:45 - 12:15	2.3	Model Development - P1	Initiate development of additional models.	Instructions (5 mins) Develop model for nuclear weapons (55 mins)	Provides instructions on outputs, available factors, etc. (additional handout); answer questions.	Separated into 3 groups of 3 persons each.			Provides each group with butcher paper and pens.	
12:15 - 12:45		Lunch			Assists.	Develop model.	Facilitates.	Facilitates and answers questions.	Captures discussion and collects rough models.	Captures discussion.
12:45 - 13:30	2.4	Model Development - P1	Introduce START/RAS model and develop rad model.	Presentations and discussion (30 mins)	Facilitates presentation and discussion.	Each group presents their model, followed by discussion (10 mins total per group).	Prepare Roulette Board		Backup files	Backup files
				Introduce START/RAS model (10 mins) Develop model for radiological weapons (20 mins)	Asks questions (asked not to judge yet).	Each group develops their own model.	Facilitates.	Answers questions.	Captures Q & A.	Captures Q & A.
				Presentations and discussion (10 mins)	Facilitates presentation and discussion.	Each group presents their model, followed by discussion (3 mins total per group).		Facilitates and answers questions.	Captures discussion and collects rough models.	Captures discussion.
13:30 - 14:20	2.5	Implicit Evaluation	Revealed preference for models.	Instructions (5 mins) Betting (25 mins)	Provides instructions on how to "bet".	Place chips on both rad and rule model tables.			Distributes poker chips to each participant.	Distributes poker chips to each participant.
				Discussion and critique (20 mins)	Facilitate open discussion about results and 5 minutes devils advocacy.	Discuss and critique models / results.	Record chips for each person for each mode (Rad)	Record chips for each person for each mode (Rule)	Capture discussions.	Capture discussions.
14:20 - 14:30		Break			Facilitates synthesis.	Separate into 3 teams (randomly assigned, but 1 naive participant and terrorism expert on each). Request to develop the best C&C structure for 2 given terrorist organizations (Hizbullah and Aum Shinrikyo).	Complete count	Complete count.	Capture discussion.	Capture discussion.
14:30 - 15:00	2.6	Synthesis	Synthesize model elements from all models.	Synthesis (30 mins)	Facilitates synthesis.	Separate into 3 teams (randomly assigned, but 1 naive participant and terrorism expert on each). Request to develop the best C&C structure for 2 given terrorist organizations (Hizbullah and Aum Shinrikyo).	Read instructions.		Capture discussion.	Capture discussion.
15:00 - 16:00	2.7	Team A / Team B	Pseudo-experiment with model.	Instructions (5 mins)	Assist as necessary.	Participants try to determine C&C orientation of each group. One team directly applies the best model, while the other explicitly does not. Present C&C structure consecutively.			Captures structures.	Captures discussion.
16:00 - 16:15		Break			Facilitate.				Captures structures.	Captures discussion.
16:10 - 16:55	2.8	Roundtable Discussion	Elicit general feedback.	Roundtable discussion (45 mins)	Facilitate discussion.	Comments on overall effort, specific progress made during elicitation, suggests next steps, etc.			Capture discussion.	Capture discussion.
16:55 - 17:00		Wrap-Up and Thanks								
17:00 - 17:15		Adjourn Staff Refresh							Backup files	Backup files

Appendix 3: Elicitation Role Playing Scenarios

Brief Summaries of VNSAs and Resultant Scenarios

Apache Dawn

This group was motivated by the fact that the white man had lied to their tribe repeatedly; he had pillaged the homeland and forced them to move to the desert. They have had enough and do not see the white man as changing his way if history is an indicator, so he must be punished irrespective of the consequences. Since the tribe is geographically isolated and it is significantly outnumbered by the white enemy, the tribe has decided to give the United States a taste of its own oppressive medicine.

There was some discussion among the group members to attempt to blackmail the US government; however, a consensus was reached that blackmail attempts would be futile due to the superior power and resources of the United States. Additionally, the tribe does not want anything in return.

Out of a 6,000 person tribe, 400 were involved in the nuclear plot, including several who had become trained in nuclear weapons technology. The following three scenarios are based on this background:

1. A nuclear bomb was assembled in New Mexico and driven to downtown Washington D.C. There was one tribesman who was in charge of driving and detonating the bomb in D.C. where the capital will go up in a ball of fire. It will only be a matter of time before one out of the four hundred involved members says something, thus members of the organization will liquidate all their assets. Their retaliation will be in the second coming.
2. There are five nuclear bombs assembled in New Mexico and driven to five different cities. There is one person in charge of the transportation and detonation of each bomb. The tribe did research to find which cities are the most densely populated with the lowest percentage of Apache residents. (Washington D.C., New York City, Los Angeles, Little Rock, and Chicago were suggested as possible targets).
3. The tribe unfortunately does not have the resources to make a mushroom cloud appear; however, they are content with setting off a dirty bomb. Since the tribe lives in the United States, they are at a tactical disadvantage and will not be making any demands of the United States. This is a suicide mission for the entire tribe, but it will cause slow suffering to the white enemy as well (which is the goal).

Guardians Of The Free Republic

This group believes that the US government has undermined the founding principles of the constitution since the fourteenth amendment was ratified. The organization is a four tiered structure with a president at the top, then a vice president, a head of state, followed by a thirteen member senate. Twelve to thirty of the group members are scientists. This white supremacy, apocalyptic group suggested the following three scenarios:

1. A small, functional, nuclear weapon was assembled in Montana. This gun-type device (HEU) is intended to bring about the final blow that must be struck against the US government. The group is destined to live in the Pacific Northwest so they are sending a technician and a senator (who are members of the group) to detonate the device in New York City. The leaders of the group had a strong influence on this final decision even though the group claims to be a democratic republic.
2. The group now has access to five nuclear devices, thus it is sending out five, two-man teams to different locations. One of the weapons will be detonated in New York City and then a message will be sent stating that if the organization is not granted property rights in the Pacific Northwest then the other bombs will be detonated. In case the two agents who detonated the New York bomb are traceable, the group will claim that ten of their brothers died in the attack. This will hopefully delay

the authorities in finding the true perpetrators of the attack. All of the sleeper agents have the authority to detonate the devices, and they have been given instructions to do so if they find out that the reservation in the Pacific Northwest is attacked or if the New York City group is discovered before a successful detonation.

3. After a device is detonated in New York City the group will bluff that they have four more devices in other cities. They will then be granted their reservation land in the Pacific Northwest and stay there with the constant threat of detonating devices if the government tries to take away their land.

A participant commented and insisted that the scenarios that involve the group obtaining and maintaining land in the United States is unrealistic since the reservation would be land locked. Another responded that his group believes the threat of weapons will protect the group from future attacks. Furthermore, since the group believes that the end times are near, how long they are able to maintain the reservation land did not play into the decision making process. One participant commented that after the group settles down in the reservation the members will become less dedicated to the mission. Another elicitation participant added that this scenario is patterned on the assumption that right wing groups do not have realistic goals initially.

Chivalric Order of the Golden Dawn

This group hails the famous Charles de Gaulle and looks to him for guidance in their mission to bring about Armageddon. They decided that Las Vegas, the city of sin, is to be the target of their attack.

Their organization is very hierarchal with thirty different levels the five thousands members can pass through. It takes one year to progress through a level of the hierarchy. The 5,000 members included sophisticated people with specialties such as ex-military, scientists, and communication experts. Their members are spread out all over the world with the group's headquarters in France. The leader of the organization decided to send a five to fifteen person team to Las Vegas consisting of logistics, security personnel, and scientists who have the technological skills to detonate a nuclear weapon.

1. The leader of the team in Las Vegas has orders to detonate the weapon when appropriate, and only s/he has the ability to detonate the device. The weapon will not be detonated until after a political statement has been made. This statement will appear everywhere simultaneously: on the TV, radio ads, websites, etc. After this message is received by the public, the team will set off the weapon at the Bellagio.
2. In a five-weapon nuclear scenario, the organization will send two weapons to Las Vegas, one to Mecca, one to Moscow, and another to Israel. The goal of the group is transformative Armageddon, thus the members are not concerned with being discovered because the world is going to change as a result of their actions regardless of being caught or continuing to exist as a group. In other words, the group is not concerned with receiving credit for the attack. The members want to hijack the Russian arsenal and given Russia's political status it is likely that one or more states will respond; this will get the ball rolling towards Armageddon.
3. In the radiological scenario the group does not have enough resources for a nuclear attack so they simply stockpile radiological weapons. The agent is cobalt 60 and they didn't believe they had enough to make a significant impact. If the group was to move in this scenario it is important to note that they assume their members can move freely since no one knows who they are. They would bring the weapon in from the Pacific side and ship it to Las Vegas.

Sons of Jihad

This group is defined by absolute loyalty to the two leaders, who are brothers. It is an offshoot of al Qaida and relatively small with about two hundred fighters. Any defectors are summarily killed, thus the leaders maintain a solid grip on their members.

1. The two brothers have strict control of one small, but functional nuclear weapon. This was obtained through ISI and transported to Washington D.C. One of the most senior members of the organization swore an oath before s/he was entrusted with the task of transporting the weapon. There was some debate as to whether a second person should accompany the first as backup. The device will be assembled while being transported, and since they don't want to be captured there will be no communication once the mission is underway. The transporter need not be very tech-savvy because the device will already be assembled once it reaches the mainland. The transporter(s) have complete authority once the device is on its way; since they don't want to fail impotent they have pre-delegated authority to blow it up.
2. With the five devices the group has obtained they are planning on attacking Washington D.C., Paris, Las Vegas, Amsterdam, and New York City. They unfortunately did not have a sixth device with which they were going to attack London. The command and control structure is the same as in scenario one, however there will have to be five to ten very dedicated people to carry out the mission (one to two per device). It will take more time to train this many people and ensure they are loyal. The individual teams are dispatched with the goal of detonating simultaneously on a predetermined time and date. They are given the authority to detonate if in danger.
3. In the radiological scenario the group has enough cobalt 60 for a small RDD to be used in Washington D.C. Their goal is to maximize contamination and minimize the risk of detection. The device will be assembled once the group gets closer to the target.

Appendix 4: Future Backwards Narratives

Participant 1

On September 11th, 2016 at 7:42 a.m., Al Shabaab, a terrorist group acting with the blessing of al Qaida, was successful in causing a meltdown at the Indian Point Nuclear Power Station roughly thirty miles from New York City. The weather was cool and overcast, and there was a brisk breeze blowing toward New York City from the power plant. The members of the six person team were educated males who had trained abroad, so they had operational knowledge of the type of plant but not technical knowledge of this particular facility. One member of the group worked at the plant so he knew where to place the charges that would cripple the cooling system and cause the plant to melt down. Two members of the team were killed during the assault, but the remaining four succeeded in gaining entry to the facility. All members of the team were male and US citizens. Five of them were in their mid-twenties. The sixth member, the leader, was several years older. The team leader was chosen for his commitment to the cause and for his leadership ability. After he was dispatched to CONUS, he had operational control and was not required to communicate with his superiors for further approval before launching the attack. The release of radiation resulted in illness in thousands within days and tens of thousands from cancer over the next three decades. New York City and the surrounding areas were fully evacuated and remain unoccupied as of today (in 2050).

Participant 2

On the day after the fifteenth anniversary of September 11th, the fourth generation of al Qaida detonated radiological devices in malls around the country. This date was chosen to weaken the morale of the United States. One particular device was placed in a truck near the door of the synagogue next to the Ground Zero Mosque. The group members wanted to recapture the magic that al Qaida had inspired after September 11th. The terrorists had received their training from the University of Maryland's nuclear physics department so they knew how to handle the small back-pack radiological devices. The most difficult part of their mission was smuggling the weapons through the Mexican border along with cocaine. The leader of the group, in Afghanistan, did not have operational knowledge or control of the attack; the operatives acted independently. However, the leader did pick the time and date of this "fire and forget" mission a year in advance. Radiological detectors in New York City did not pick up the weapon due to a lack of proper funding and hence adequate maintenance. Their leader was not completely confident they would follow through, but there was no downside to failure because a second attempt would be made in any event. Ultimately, one member of the twelve person team would commit suicide when detonating the device from a truck parked in downtown Manhattan. The group was somewhat hesitant to blow up the Ground Zero mosque, but it did not deter them from carrying out the mission in the end. The suicide actor was a European-born Muslim who was radicalized in the post September 11th environment. He believed that the West has been at war with Islam and that a dramatic event was needed to rekindle the flame of militant Islamism. Another challenge the group faced was maintaining OPSEC given the great focus of the US intelligence community and law enforcement on identifying and interdicting precisely this type of group. Also it was difficult keeping the team members committed with the leadership living far away and the members not reporting back. The leader in Afghanistan was a former second-tier al Qaida leader who was inspired by Bin Laden and frustrated with the inability of al Qaida to mount a second large strike on the United States.

Participant 3

I remember the terrorist attack of October 2016 very clearly because the lead planner was a classmate of mine from the US Naval Academy. Lee Sirhan Hinckley was a talented mechanical and nuclear engineer. He had a strong sense of integrity. He was deeply committed to nuclear safety. His favorite movie was the *China Syndrome* because he related to the character played by Jack Lemmon, who was a retired naval commander and was willing to risk his life to save the nuclear power plant.

Lee Sirhan Hinckley had reportedly grown increasingly concerned about the safety of the Palo Verde Nuclear Power Plant in Arizona, where he worked as a shift supervisor. He had repeatedly mentioned to the

plant's upper management his concerns but he felt that they had ignored him and declined to conduct a thorough investigation. His study of other nuclear plants in the United States led him to believe that many plants had safety problems especially as they were receiving life extensions to operate for another twenty years.

During 2016, the two leading presidential candidates had often debated the issue of nuclear power. One candidate was so strongly in favor that she wanted the federal government to offer more than \$100 billion of loan guarantees for nuclear power plant construction.

So, Lee Sirhan Hinckley decided that October 10 was the fitting day to attack, especially because it was Columbus Day or Conqueror's Day as many Native Americans viewed it. Hinckley admired the Native American spirit.

He had decided to drive his SUV inside the main security perimeter of the plant and to try to drive it as far into the inner security perimeter as possible. Because he was an employee at the plant, he was not denied entry. He had laden the SUV with about 2,000 pounds of a fertilizer bomb. He knew that this explosive alone would not cause a nuclear meltdown. He wanted to draw attention to the poor state of safety at the nuclear power plant.

To build the bomb, he had enlisted the help of two engineers who also had worked at the plant. These two men were loyal to Hinckley because they had served under him on the nuclear submarine where Hinckley was the executive officer. The three men called their group the Engineers for Safe Energy.

Participant 4

At 9:15am on Wednesday, December 14, 2016, a large radiological weapon was detonated in L'Enfant Plaza Metro station in Washington, DC. Dozens died at the scene and countless others suffered life-threatening injuries. L'Enfant Plaza lies at the intersection of the Green, Yellow, Orange, and Blue lines, so the explosion essentially crippled public transportation throughout the District. Although no group initially stepped forward, a small and extremely radical faction of the United Freedom (UF) movement called United Freedom Riders (UFR) eventually accepted responsibility for the attack. UFR's terrorist activities were previously unknown.

UF was a right-wing political lobbying group that supported the anti-homosexuality and anti-abortion movements. From 2010 to 2016, the Congress of the United States repeatedly passed legislation expanding rights for homosexuals and birth control. Most recently, the Senate had killed an anti-abortion bill that the UF had successfully shepherded through the House of Representatives. UF became increasingly agitated with Congress's actions. Frustrated and angry, a small extreme radical faction of the group decided to splinter off from the main group and take action to accomplish their cause.

The leader (A) of the small faction, United Freedom Riders (UFR), secretly began recruiting members for a mission. "A" was a married man with six children, very religious, and with a heightened sense of self-righteousness. He was a very withdrawn man, often away from home. He, along with a small group of his comrades, had decided to smuggle a radiological weapon into the Senate building and detonate/release it. The group recruited skilled, loyal individuals able to assist in building the radiological weapons, plan the mission, and implement the attack. "A" ordered the group to build two radiological weapons. He intended the first to be detonated in the Senate building in retribution for vetoing the anti-abortion bill. He intended to store the second weapon until needed.

UFR finished building both radiological weapons in October of 2016. "A" decided that the first target would be the Senate building, particularly the wing housing the Senators that were instrumental in vetoing the anti-abortion Bill. In order to protect the anonymity of the higher-level members of the group, he delegated physical control of the weapon to a junior level member of UFR. He maintained communication with those in physical control of the weapon by cell phone and email. However, once he gave the command to implement

the plan, “A” retained the communication line with the lower-level member in physical control of the weapon only to recall authorization.

On Tuesday, December 7, 2016, a member of UFR attempted to smuggle a radiological weapon into the Senate building in a briefcase with the intention of detonating/releasing it. However, security guards noticed the man's unusually suspicious behavior and stopped him. He began to run into the interior of the building, but was captured and the device discovered. Those in immediate contact with the device suffered secondary harm from the radiological material, but the device failed to detonate.

Due to the failed attack on the Senate building, “A” decided to plan a second attack with the remaining radiological weapon—this time on the Washington, DC Metro. The group chose Wednesday, December 14th for the attack—two weeks before Christmas.

At 9:15am on December 14, 2016, “B”—a lower-level member of UFR—got on the Green line of the DC Metro from College Park with a backpack holding the radiological device, traveling into the city. “B” is an unattached (no nuclear family or intimate relationship) male skilled in handling weaponry with a personal commitment to the cause. He arrived at L'Enfant Plaza Metro stop in downtown DC and exited the train. He walked down into the subway with the radiological weapon in his back-pack and left it on the bench. It detonated three minutes later with a timer.

Participant 5

On April 16th, New York City was attacked for its international symbolism. On this warm, breezy day, sixty operators, who belonged to the Red Dragon Brotherhood and were determined to undermine the United States, placed sixty radiological devices around Manhattan in trashcans and under cars. The devices were small and shielded; the shield was removed at the last minute causing some harm to the operatives, not all of whom were of Chinese decent. The time and date the devices were placed was predetermined; however it was the individual operative's decisions where the devices were placed. Each operative was well educated and allowed to make independent decisions after entering the city. Three of the operatives were caught before they were able to place their devices. The devices were manufactured in China and brought into the US on a fishing boat through Maine. This attack had a huge psychological effect on the nation, even though the physical wellbeing and infrastructure of the nation was not significantly harmed.

Participant 6

A small, independently operated branch of the Earth Liberation Front (ELF) decided that ELF's smaller attacks were not capturing the attention demanded by their cause. It was about time, they claimed, that the US realized the risks of radioactive material. The group consisted of several former military, special ops members who had fought in Iraq and Afghanistan. These members were further disgruntled that the war in Iraq was seemingly only for oil. Other group members were well educated individuals concerned with the negative effects of nuclear materials and fossil fuel.

The group penetrated a nuclear facility with a truck bomb on a windy, clear day and detonated it in a specific location that ensured a significant amount of nuclear material escaped. All of the group members died in carrying out the attack. The group was in control of the explosive device from its creation to its use. The operation was led by one of the former military members of the group, though the group itself was managed by consensus. Combining the structured thinking of a former operational planner with the fervor of someone “converted to a new cause”, the operational leader was both strategic in planning the operation and efficient in carrying it out. Their message was that it is not safe to store nuclear material at a location where people like them can get at it. Since the members were technically trained in the military, the operations part was relatively easy for them. The most difficult part was planning this event in strict secrecy since they knew they were under close scrutiny by law enforcement agencies. During the actual attack about twenty guards at the facility died, which is more than was intended by the group. The mission was considered a success by the group members.

Participant 7

On the Fourth of July, in the port of Miami, a nuclear device was detonated. An entrepreneur who had invented an electronic communication device, that was in high demand by the Chinese, decided to cripple the nation (but not destroy it) after the US government forbade him from selling the product to the Chinese for reasons of national security. His son and daughter had just died in an auto accident and his grandson was terminally ill with leukemia. The last thing he wanted was for the US to stop its ingenuity (particularly with regards to medical advancements for leukemia). He was further disillusioned by the federal government's refusal to allow him to market his product in China; doing so would have made him a mega-billionaire. Through his military contacts in China, the man was able to obtain a suitcase-sized nuclear bomb which he transported to the port of Miami via his yacht. His grandson was the only person aboard who knew the package was a nuclear weapon since he was the one in charge of detonating it on Independence Day. The rest of the crew was told the cargo was a rare piece of Chinese art that was being smuggled into Miami and they would be compensated handsomely for its safe arrival. The grandson was formerly in the military and did business with China so he had operational knowledge of nuclear weapons and the ability to understand Chinese instructions. Originally, the grandson was supposed to detonate the device at the start of the fireworks but he was unable to detonate it until later due to his medical condition.

Participant 8

A socially-isolated, young, British male was an ardent follower of conspiracy theories. He was a computer wizard and believed that the power of the US had to be kept in check. Therefore, he hacked into the computer systems of Covered Cliffs Nuclear Power facility in Maryland and caused the plant's cooling system to shut down which led to a meltdown of the facility. This plant was chosen for its proximity to DC. The death toll was relatively low; however, the area was uninhabitable for years after the incident. Residents of neighboring towns have been found to have a higher likelihood of being diagnosed with cancer.

Participant 9

On January 10th, 2016 at 10:00 a.m., it was a clear, sunny day in San Francisco and San Diego when multiple nuclear warheads hit the west coast. Kim the Fatter was directly responsible for the attack. He ordered the attack on the US and his subordinates in the North Korean military executed their orders. Kim was concerned he was losing power so he wanted to make a final stand. The military personnel did not have issues following orders because they had practiced this multiple times. It was considered treason to not follow the commander's orders. The individuals who "pulled the trigger" were non commissioned officers in the North Korean military, both of whom were in their thirties. Both had high school educations and limited technical knowledge. Most of the ICBMs reached their destination despite existing US countermeasures because it is difficult to shoot down warheads or missiles in flight.

Participant 10

On Friday May 27th, 2016 in Lower Manhattan, a 6kt yield fission device weighing 1,800 lbs. was detonated on a yacht that had been chartered for a four week holiday. Six Pakistan-born, British college students flew into Bermuda and boarded the yacht. Al Qaida had trained the leader of the group on how to use the weapon and had paid for criminal smugglers to transport the weapon, via a fishing boat, onto the yacht between Bermuda and New York City. This was all executed according to a pre-existing plan.

Appendix 5: Team A/Team B

Hizballah without Models Applied

The goals of Hizballah would probably be in line with those of Iran. If they obtained a nuclear weapon they wouldn't use it just as protection/defense against the United States; they would try to do something bigger with it. This action would be directed against either Israel or the US's support of Israel.

Defeating or humiliating Israel or the US would be a means to an end of expanding Shiite goals in the case of Hizballah. The decision to use a nuclear weapon would likely be a compulsive one because using a nuclear weapon probably means suicide for the group (if history is any indicator). This would mean that for Hizballah to survive, the operational team would have to be distant from the leaders or the group. Assuming the leadership would try to threaten the US in some way before detonating the weapon (in order to achieve political goals), the leadership would have to be mobile once the threats started. This leads to several tactical considerations with respect to communication between the leadership and the operators.

One participant's primary concern, which (s)he brought up several times throughout the discussion, was if Hizballah obtained a nuclear weapon and was using it to fulfill a political goal by threatening a state, how would they convince outsiders that they actually had a weapon? There was no direct answer given to this question but it led to several considerations about the communication of the group with the rest of the world as well as among members.

Since this operation will be planned by members high in the hierarchy of Hizballah, it is important that they pre-delegate some authority to the operational members (but not a lot). The field actors will be given pieces of the puzzle and will have the full picture when it's time to detonate the weapon (this includes the detonation codes which the leaders will have until the end time). This led to more in-depth discussion about how communication would be maintained between the leaders and the operators. Possible methods of communication included internet, snail mail, and radio signals. It was briefly mentioned that since communication would be limited once threats against the US were published, an operative with the codes might be sent to the US before the threats started. This way s/he could relay the codes in person to the group operatives. (This scenario was given less consideration).

Hizballah with Models Applied

The group made an initial assumption that Hizballah would be in the bottom right scenario, i.e. an ongoing violent campaign in which the organization seeks to survive. Hizballah was assessed to possess high leadership resilience. In addition, as a quasi-state, it controls significant territory and provides social services within this territory, so survivability was deemed very important. The group therefore quickly determined that the model was predicting Hizballah to be much more assertive.

The group then considered alternative factors that might lead Hizballah to adopt a more delegative approach. First, one participant noted that Hizballah runs its operations similar to that of a state's military, where delegation at the operational level is fairly common. Second, the group noted that Hizballah might want to use a nuclear weapon for its deterrent value, which would fall outside the scope of the current model. Despite these considerations, the group determined that the model heavily favored an assertive approach.

Hizballah with All Groups Present

Both groups consented that state sponsorship was an important variable at the end. With state sponsorship in the background, it is not so important that the weapon bearers have a military victory over the US (because that is impossible). The end goal would be to wear the US down and break the will of the people.

Aum Shinrikyo without Models Applied

The discussion focused on Aum's previous CB attacks and assumed that the nuclear scenario would be based off of the pre-1995 capabilities of Aum. Participants noted that Asahara sent members out to execute a specific plan, but the plan fell apart. Afraid to return having failed to hit the targeted judges at the designated location, they went to the judges' homes and released agents near it. Thus, the initial decision was very assertive, but the strike team did have autonomy to make operational adjustment.

The discussion then moved to examine Aum member characteristics. The group attracted scientists and intellectuals, especially people who did not do as well as they wanted on university exams. Many were young people looking for meaning. They were basically competent members of society who had personal inclinations to believe in the powers of Asahara. Asahara was very charismatic, developing a cult of personality, which included claims to possess magical powers like the ability to levitate.

Finally, the group agreed that the large number of Russian members fit nicely with the apocalyptic aspirations of Aum. Aum could therefore acquire a Russian nuclear weapon, which if identified forensically, could spark a larger nuclear conflict between the United States and Russia. This attempt to spark a larger conflagration would require some distance from Aum and Japan in order to be most effective.

Given these various factors, the group determined that the nuclear plot would be highly assertive until it was time to launch operations. At that point, Aum would switch to a delegative approach.

Aum Shinrikyo With Models Applied

The group determined that Aum's apocalyptic philosophy meant that it had no day after considerations, and therefore fit into the top right-hand quadrant of Model 2. This makes it likely for Aum to adopt a delegative approach. Switching to Model 1 factors, the group noted that Aum has high external threat, survivability was not necessarily a significant consideration, and that if the attack is in the US, Aum would have low ability to communicate or access the target. Thus, Model 1 would also indicate a delegative approach for an attack in the US (less clear if it were elsewhere).

Discussion of Aum Shinrikyo with All Groups Present

Both came up with delegative, although the non-model group differentiated between the preparatory and operational stages. Moreover, both groups drew on elements from Model 3, often as a tie breaker between Models 1 and 2. There was additional discussion about how to prioritize Models 1 and 2, i.e. do one then the other or both simultaneously.

Appendix 6: VNSA Nuclear Command and Control Profiles

Note: Profile 1 utilizes the headings originally provided to the research team to give a more comprehensive understanding of the profiles. All following profiles (2-6) use abbreviated headings. The full directions are provided in Appendix 7.

Profile 1: US Right-Wing Extremist Militia

The Republic's Defenders of Yahweh and the Constitution

Charles P. Blair
Federation of American Scientists

I. Pre-Analysis

A. General Background of the Group

Having come together less than a year ago, the small and temporarily insular Republic's Defenders of Yahweh and the Constitution (RDYC) formed with the sole purpose of defending Americans from a powerful and evil force opposed to freedom: the New World Order (NWO). NWO is the acronym commonly used in the right-wing US militia-type community writ large to describe the leaders, forces, methods and goals of a secretive global cabal of immense power. These hidden power-elites, NWO believers fervently contend, seek a one-world socialist government where no country is sovereign; its citizens stripped of all power, along with any ethnic or national identity. Ultimately, all humans will come under absolute NWO control for use as virtual slaves. Moreover, the RDYC and many other conspiracy theorists believe plans of the NWO have already reached fruition in almost all areas of the globe—via propaganda and front organizations. Only the United States, the last holdout of freedom, can prevent the NWO from actualizing its globalist tyrannical plans. Thus, the RDYC agreed at their first meeting, the definitive battle for global control will soon rage in the US with the public already being led to likely enslavement via clever propaganda, use of NWO forces from other areas of the globe to impose control over Americans, and traitorous US leaders who seek to benefit from the NWO's success.

Hidden to all but the most observant, the RDYC knows the NWO has already enacted their plans to transform Americans into powerless slaves with no ethnic or national identity. Deluded with propaganda and deceived by Jews and traitorous opportunists, the American masses are blind to this threat. In contrast, the RDYC—gifted with far greater insight and understanding—perceives reality in all of its horrifying clarity.

B. Identification and Brief Exploration of the Group's Key Decision Maker(s)

1. Benjamin James Eden: Leader RDYC

Benjamin Eden served in the US Air Force during the Vietnam War. Eden served as an aircraft mechanic, where he further improved his mechanical savvy that began as a hobby during his early years. In the Air Force, Eden learned how to mold metals into different forms, a skill which he would later hone after separating from the Air Force. After completing his tour of duty in Vietnam, Eden married Paula Ross of Everett, WA, home to Boeing. Eden was employed by Boeing as a mechanic, repairing different kinds of machines used at the Boeing facility in Everett. However, Eden was let go by Boeing in the early 1990s because of personnel cutbacks, subcontracting, and outsourcing. In the ensuing years, Eden developed his engineering and metal-working skills; over the years he has built a large and well-equipped workshop at his home. Blaming his unemployment on increasing globalization and free trade agreements, which he believes

are being orchestrated by Jewish bankers and financiers, Eden became increasingly enraged with what he saw as illegal immigrants or foreign companies influencing the American economy and threatening the American way of life. Combined with his increasing frustration with the government after the Ruby Ridge Crisis and Waco Siege, Eden was convinced that the NWO had begun infiltrating the US government and needed to be stopped before it could threaten even more true Americans. Eden spent the next several years as a member of various right-wing militia organizations, particularly those subscribing to the Christian Identity ideology. Benjamin Eden is the RDYC's leader, a position which came naturally to him, given his age and longstanding devotion to combating the NWO, which are legendary among the militia community. Benjamin Eden is strong in his convictions that the RDYC must use unconventional weapons in its resistance to the NWO as conventional attacks such as the Oklahoma City Bombing are not the most effective way to catch the American public's eye.

2. Paula Ross-Eden

Paula Ross-Eden is RDYC founder Benjamin Eden's wife. Paula is unquestionably loyal and fanatical to both the cause and her husband. Like her husband, Paula blames foreign influences for her husband's firing from Boeing and for attacking the American way of life.

3. Rory Eden (Recently deceased³⁶⁰)

Rory Eden, the younger brother of the RDYC's leader Benjamin Eden, had like his brother maintained membership status in several militia groups based in the Seattle region for many years. Rory had no military experience; he had been an independent truck driver for most of his life, preferring the mobile and independent lifestyle it provided. Rory met his wife, Nancy, at a militia convention he attended alongside his brother soon after Benjamin was let go from Boeing. Both Rory and Nancy were steadfastly committed to the upcoming battle against the New World Order and had both contributed significantly to the RDYC. Like his brother, Rory held strong views that illegal immigrants and foreign organizations are controlling the American economy and was convinced that the United States government will eventually suspend the Constitution and declare martial law as part of the NWO; Rory also subscribed to Christian Identity (CI) beliefs, however, he was not as fervent in his devotion. Unlike his brother, though, Rory was uncomfortable with the use of nuclear weapons on American soil. Rory's drug and alcohol abuse had made him unreliable at RDYC meetings. His and Nancy's marriage grew increasingly abusive when she realized he had been stealing money from her to buy crystal meth.

4. Nancy Eden

Nancy Eden is Rory Eden's wife. She has been a committed supporter of the militia movement her whole life; her first husband was killed in a shootout with FBI agents and since then she has made the militia's cause a personal crusade to the point that avenging her first husband's death at the hands of federal agents supersedes her relationship to her current husband. Like Paula, Nancy has embraced the RDYC's mission with a gung-ho attitude and is fanatical in her devotion. With the erosion of her marriage, Nancy has thrown herself into the RDYC and is typically the first volunteer for any militia needs.

5. Richard Hanlon

Richard Hanlon is a former US Army Special Forces soldier who specialized in engineering and demolitions. Hanlon is from Spokane, WA and enlisted in the Army straight out of high school. Hanlon served as a

³⁶⁰ Rory Eden, Benjamin Eden's brother, increasingly expressed apprehension and doubts about the RDYC's plans. Worried that Rory might consider abandoning the RDYC—compromising the group's duty to protect America from an almost invisible enemy—the seven members met outside of Colville, WA, where RDYC member Richard Hanlon lived. Under the guise of a trip into Colville National Forest for weapons training, Benjamin Eden personally shot Rory and buried his body near an old quarry off of Thomas Mountain Rd. where the body would be difficult to find. This action solidified Benjamin Eden's authority over the group—all dissension over operational objectives and targeting ceased.

combat engineer before being accepted into Special Forces training. As an Army Special Forces soldier, Hanlon deployed to Iraq in 2003 as part of Operation Iraqi Freedom as a sergeant in a special forces unit based out of Fort Lewis, WA. Hanlon went on to serve another tour in Iraq and was preparing for his third tour of duty as a special forces engineer when he had come back to Fort Lewis after drinking too much at an off-base bar and began throwing rocks at the on-base chapel used for Jewish services. When soldiers from inside the chapel confronted Hanlon, he accused them of being Zionist agents for the NWO. As a result, Hanlon received a bad conduct discharge from the Army and moved to Colville, WA, not too far from his hometown of Spokane. While readjusting to civilian life, news from Iraq reached Hanlon that several of the soldiers from the Special Forces unit he was set to deploy with to Iraq were killed in an IED attack. Hanlon's grief and rage over the loss of his old unit coalesced into an intense hatred for Jews, believing that were it not for the Jewish soldiers reporting him and getting him discharged from the Army, he would have been able to successfully defuse the IED and prevent the loss of his old special forces team. Hanlon's love of guns and anti-Semitic beliefs led him to the Seattle militia convention where he met Benjamin Eden, who recruited him to the RDYC. The two bonded over their anti-Semitism, and while Hanlon is sympathetic to CI, he does not practice the ideology. Upon joining the RDYC, Hanlon recruited two other soldiers he knew from being stationed at Fort Lewis that he knew would embrace the RDYC just as he did.

6. Leroy Wilkes

Leroy Wilkes is a former US Army Small Arms/Artillery Repairer who was last stationed at Fort Lewis, WA. Originally from Texas, Wilkes grew up around guns and a father who was a lifelong supporter of the Second Amendment and gun rights. Wilkes joined the Army in 2006 with aspirations of becoming an Explosive Ordnance Disposal (EOD) Specialist. Wilkes failed EOD training and was deployed to Afghanistan as a Small Arms/Artillery Repairer. While part of a convoy carrying weapons between firebases, Wilkes was fired upon by Taliban forces attempting to hijack the weapons on board. Wilkes was injured during the attack and spent several weeks recuperating from the attack back at Fort Lewis. Wilkes continued to work in the armory at Fort Lewis, where he met Richard Hanlon before Hanlon was discharged from the Army. Bonding over their interest in guns and Wilkes' aspirations to be an EOD specialist, Wilkes began to revere Hanlon and took Hanlon's discharge from the Army personally, believing that the punishment did not fit the crime. After separating with the Army, Wilkes moved to Kettle Falls, WA, a small town not far from Hanlon's home in Colville. Wilkes owns a gun store in Kettle Falls. With the election of Barack Obama in 2008, Wilkes became concerned that the new president would severely restrict his Second Amendment rights and started looking into militia organizations. Hanlon recruited Wilkes to join the RDYC, knowing that Wilkes' skill in weapons and explosives maintenance would come in handy.

7. Elliott Moore

Elliott Moore currently serves as an Army Ammunition Specialist at Fort Lewis, WA. Before Leroy Wilkes left the Army, they were close friends despite serving in different units. Before becoming an Ammunition Specialist, Moore served as an infantryman in Iraq on one tour. During this tour, Moore witnessed a suicide bombing in an Iraqi marketplace his unit was visiting, an event which left serious emotional scars. Still deemed fit for service, Moore was transferred out of the infantry and became an Ammunition Specialist, where he now specializes in maintaining various types of explosives. Unbeknownst to his fellow soldiers, Moore was once a member of the National Alliance and is a believer in the fight against the NWO. Moore has avoided openly showing his support of the National Alliance and other extreme right-wing causes so he does not risk his Army career. Wilkes and Hanlon recruited Moore for the RDYC, Wilkes having known about Moore's right-wing leanings from their time together at Fort Lewis. They hope to use Moore's position in the base armory as a way to gain access to explosives and high powered weapons they will need in their fight against the NWO and for their upcoming operation.

C. Ideology

Conspiracy: The RDYC's basic belief is that the New World Order seeks to take over the US and enslave its population. The rest of the world has already been secretly co-opted but the NWO needs complete global

control to fully actualize its plans. Seeking to finalize its global ambitions, the NWO has drawn some traitorous US leaders into its sway. If successful in its bid to control the US, the NWO plans to enslave Americans to serve NWO leaders. Believing that American soldiers would refuse to assist the NWO in its conquest of the United States, the RDYC agreed that traitorous US leaders (many under the control of the Jewish NWO) would collaborate with the NWO in carrying out false flag operations. The RDYC foresaw the NWO and traitorous US leaders creating events that generated enough fear, shock and general insecurity to allow for the US public's acceptance of security measures at the expense of civil liberty. Thus, the NWO's success in taking over the US required extensive commitments to terrorist attacks (e.g., a Murrah Federal Building-type bombing) or epidemics (something akin to the H1N1 pandemic), and other such events. Mounted by NWO and traitorous US leaders and falsely attributed to extant and dire threats (likely non-state in nature—a new and extremely powerful jihadist terrorist group for example), an insecure general public would tolerate the imposition of martial law, the suspension of the US Constitution and, eventually, the building of a climate of general fear sufficient to allow for suspension of civil liberties and the confiscation of all firearms.

Religious: Two members of the RDYC—including its leader—adhere to Christian Identity (CI) and believe that the NWO is a Jewish cabal. While the other RDYC members are not practicing members of CI ideology, they are sympathetic to this anti-Semitism and generally believe the NWO is dominated by Jews. CI adherents believe they are descendents of the ancient Israelites—the direct offspring of Abel. In their interpretation of the Old Testament, following the invasions of the Hittites, Assyrians, and Babylonians—the scattering of the Israelites—these “Lost Tribes” established themselves in Europe. Their biological descendents subsequently found their way to America—God's true “Promised Land” (specifically understood by RDYC's leader and other followers of Identity to be the Pacific Northwest). Identity's view toward “non-Abel” descended peoples is grim: Jews are considered the offspring of Cain—himself the result of the union between Eve and the Serpent. Thus, Jews are literally the children of the devil; non-whites are believed to be the “mud-people” whose origin predates Adam and Eve (only the offspring of Adam and Eve were made in God's likeness; their forerunners—the “muds”—literally have no soul). Giving urgency to these racial beliefs is CI's millenarianism. In contrast to popular evangelical contentions that deserving followers of Jesus will experience rapture before the Tribulation, some sects of Christian Identity believe that Christ will only return after the Tribulation (i.e., RDYC's embrace of CI is postmillennial; even proper followers of God must endure the apocalypse). Thus, two members of RDYC believe that the world is about to enter into the time of Tribulation and, as the side of good, they must fight—and help conquer—evil in an apocalyptic racial war. In contrast to the group's other four members, therefore, two of RDYC's members interpret the NWO as a Jewish cabal. Regardless, all six member passionately believe that the NWO is committed to the enslavement of all US citizens amid the destruction of all those who resist. Thus, while religious differences exist, all group members are in harmony with regard to the great peril the US faces and their pivotal role in resistance.

From this overarching conspiracy theory, almost a dozen subsidiary conspiracy theories inform RDYC's perception of reality. Here, it is important to identify three of them:

1. FEMA Concentration Camps: There are 600 – 800 fully staffed but empty concentration camps on US territory. At the appropriate point in the NWO's take-over of the US, the camps will be filled with a variety of US citizens previously tagged as problematic or recently identified as hostile to the NWO's actions described immediately below.
2. Martial Law: In the near future, traitorous US leaders, backed by the NWO, will suspend the Constitution and declare martial law. Because US citizens will not willingly give up their freedoms, these leaders will fabricate events that push most citizens into accepting martial law as a means to regain the security they have lost via false flag operations and propaganda.
3. Door-to-Door Arms Confiscation: Traitorous US leaders, backed by the NWO, will empower NWO's foreign military personnel—after they are fully trained in the US—to force all US citizens to give up their

firearms. Such confiscations diminish the threat of armed US civilian opposition to martial law and other liberty diminishing actions necessary for the NWO's success.

In short, the RDYC's ideology revolves around an extremely anti-government sentiment based on the belief that traitorous US leaders are actively working to grant control of the US and enslavement of its citizenry to a tyrannical globalist cabal probably of Jewish (Satanic) origins. Among other factors, NOW infiltration of some components of the US government and military, the RDYC maintains, delegitimizes the current US government, and necessitates active opposition to its rule. The RDYC sees itself as akin to the minutemen of the revolution: it is an armed faction attempting to protect civil liberties, maintain US sovereignty, legitimate rule and, for some members, resist the forces of Satan.

D. Constituents

Broadly speaking, the group considers all Americans to be their constituents—it is America they seek to save from the NWO. More narrowly, RDYC could be considered a White Nationalist group. Certainly the other members it is targeting for recruitment are White Nationalists or, more likely, white supremacists. However, the group's strategy is to first defeat the NWO and its traitorous American enablers. The group has no links to state sponsors (all other states are under covert subjugation of the NWO).

Resources: In the early months that followed its original meeting, the RDYC's members sold all non-essential possessions, including homes and businesses. Additionally, Investment and retirement portfolios and all other reserves were drained. Items were only considered essential if they aided in the group's objective of resisting the NWO. For example, Eden kept his home and its well-stocked machine shop. Members then pooled their money—ultimately amassing just under \$750,000. These actions allow the group to act in a mobile and highly fluid fashion.

E. Specialists in the Group

Group leader Benjamin Eden perceives that at present the RDYC possesses members with key skills necessary in constructing an IND. Since its inception one year ago, the group has remained largely "off-the-grid," quietly seeking candidates with certain skills. As the group succeeds with its recruitment efforts, it plans on producing an improvised nuclear device (IND). Eden believes that once the NWO begins its false flag operations, recruitment opportunities will widen, as certain individuals will likely be easier to recruit once they have learned the truth about the true nature of the new falsely propagated "terrorist" threat and the nature of the NWO.

F. Existential Challenges to the Group

The RDYC believes that the vast NWO conspiracy is intent on eliminating all opposition to its nefarious designs, using its vast array of agents and puppets, including federal law enforcement, United Nations soldiers and its technological surveillance, primarily satellites. As such the group feels that it is constantly in danger of being detected and identified by the NWO as free-thinking patriots and then liquidated. Benjamin Eden displays paranoid tendencies and perceives a high degree of existential threat.

Methodological Note: Understanding Data Limits from the Militia Movement's Two Waves

The readers' awareness of challenges inherent in finding evidence for this profile's factor analysis is useful in placing its findings and conclusions in perspective. Before an appreciation of why this is the case, first one must appreciate that the extreme right-wing milieu consists of three basic categories and several sub-categories.

- 1) *Single Issue: Anti-Abortion and Tax Protest*
- 2) *White Supremacists*
 - *Christian Identity*
 - *Neo-Nazi*
 - *Racist Skinhead*

- Klu Klux Klan Groups
- Racist Prison Gangs

3) The Right-Wing Anti-Government Extremist Movement

- The Tax Protest Movement (also “single issue”)
- The Sovereign Citizen Movement
- The Militia Movement

Only the militia movement—the youngest of the three right-wing anti-government extremist movements—has the combination of motivation and capability to theoretically procure a nuclear weapon or improvised nuclear device (IND).³⁶¹ The militia movement of today is the second of two so-called “waves” of the militia movement. The first wave, if broadly interpreted to include significant progenitors, began in the mid-1980s and was essentially moribund by 2003. Moreover, of those rare militia groups that actually engaged in violent anti-government activities (as opposed to criminal acts), their relevance had essentially evaporated by the late 1990s. The militia movement’s second wave began in 2009. Although the growth of militia groups in the last three years has been staggering (growing from 42 to over 350), only a few of these groups have plotted or actualized relevant anti-government activities. Thus, even when both waves are exhaustively researched and their relevant activities combined, the quantity of available evidence is limited and what is available is often dated. Moreover, relevant data on non-violent militia groups is virtually non-existent (as is, of course, data on those groups that remain underground). In short, this profile is predicated on an analysis of less than two dozen militia-type groups. This does not diminish its value, since, having scoured several hundred documents, this profile represents the most complete picture available through the use of open-sources and empirical evidence. Furthermore, there are remarkable consistencies in militia group behavior and ideology with regard to some factors that the author believes inform likely nuclear command and control arrangements.

II. Factor Analysis

A. The Leadership’s Tolerance for Uncertainty

1. *High Tolerance*: (roughly equates to a greater willingness to take risks) List all of the arguments for a high tolerance for uncertainty on the part of the group’s leader(s) in the context of a nuclear weapon.

a. The Order

During the Brinks armored robbery in Ukiah, California, members of the right-wing group known as The Order had “bandannas over their faces except the tall one – Pierce – who brazenly showed his face.”³⁶² This indicates a rather emotionally-driven behavior than a rational manner, though Pierce was not a member of the leading circle.

b. The Covert Group

The interdicted incident concerning Georgia’s “Covert Group” is another example of high tolerance for uncertainty. Samuel Crump and his associates planned to deposit two pounds of ricin simultaneously on highways in five different cities, letting the passing cars spread it through the air.³⁶³ This illustrates members’ tolerance for uncertainty with regard to specific targeting, overall effect, etc.

2. *Medium Tolerance*: List all of the arguments for a medium tolerance for uncertainty.

³⁶¹ See Task 1 of this project for more information on right-wing anti-government extremist movements and the potential to procure a nuclear weapon or IND: Blair, Charles P. and Jeffrey M. Bale. “Radiological and Nuclear Adversary Behavior Profiles,” College Park, MD: START, 2012.

³⁶² Kevin Flynn, *The Silent Brotherhood: Inside America’s Racist Underground* (New York: The Free Press, 1989), p. 234.

³⁶³ FBI Complaint, United States District Court, Northern District of Georgia, United States of America v. Samuel Crump, Case Number: 2:11-MJ-103, (November 1, 2011), p. 6.

a. Alaska Peacekeepers Militia

The leadership of the Alaska Peacemakers Militia (Schaeffer Cox) demonstrated medium levels of tolerance of uncertainty, by letting the members develop and share their ideas for potential operations with other members of the group.

b. Minnesota Patriots Council

Four members of the Minnesota Patriots Council were convicted for the attempt to assassinate local and federal law enforcement officials with ricin.³⁶⁴ What is salient in this case is that the group showed no preferences for precise targets—the outcome of the attack was uncertain in this critical regard.

3. *Low Tolerance*: List all of the arguments for a low tolerance for uncertainty.

a. The Order

Evidence illustrates that the leadership of the Order had low tolerance for uncertainty. Thorough surveillance was conducted before each operation. The group's leader, Robert Mathews, retained a list of prominent Jewish figures who were not particularly difficult to kill if Mathews wished to actually carry out a given assassination; thus, the targeting choices were realistic.³⁶⁵

Regarding pre-planning and surveillance, Robert Mathews had Jean Craig drive to Denver in order to thoroughly reconnoiter Alan Berg—where he lived, worked, frequented as well as some of his more unusual habits.³⁶⁶ In the case of the Brinks armored robbery in Ukiah, California, the particular armored truck and its precise location were carefully calculated.³⁶⁷ Although numerous mistakes were made during the execution of the heist itself, prior to the operation significant efforts were made to map out the area, plan the assault on the armored truck, and the group's precise egress.³⁶⁸

4. Having now investigated the evidence for a high, medium and low tolerance for uncertainty, identify which level of tolerance for uncertainty among the leadership is most likely and explain why.

Medium. The Republic's Defenders of Yahweh and the Constitution (RDYC) joined together with a specific strategic goal. Thus, each tactical operation is in line with this overarching goal. This allows the group to focus extensively on operational details and each mission is well thought out. Straying from the original plan, while a possibility, is not viewed favorably. Thus, ideally, flexibility would be kept to a minimum so that during the psychologically-taxing actualization of the operation, each operative could rely on their pre-determined role without the temptation to stray from their task while under pressure. However, the group also realizes that they are under constant potential threat from law enforcement and some flexibility is necessary in order to prevent interdiction and to accommodate unforeseen events during the operation.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor—the leadership's tolerance for uncertainty—might change in the next five (5) years.

If the group manages to increase its membership and these new members have military or other commensurate experience, this would increase the leadership's tolerance for uncertainty.

B. The Leadership's Definition of "Success"1. *Specific Outcome*: List all of the arguments for a definition of success that requires a *specific, predetermined* outcome (in terms of when, where and how a nuclear weapon is employed) in order for the

³⁶⁴ Jonathan B. Tucker, *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge, Massachusetts: MIT Press, 2001), p. 159.

³⁶⁵ Flynn, *The Silent Brotherhood*, p. 192.

³⁶⁶ *Ibid*, p. 174.

³⁶⁷ *Ibid*, pp. 226, 234.

³⁶⁸ *Ibid*, pp. 228, 229.

mission to be perceived as a success.

a. The Order

The pre-planning and high amount of surveillance conducted by the Order before each operation illustrates that the group leader Robert Matthews had a specific outcome in mind. Matthews finalized plans to assassinate Alan Berg despite protests of two high-ranking group members.³⁶⁹ As mentioned earlier, Matthews had a list of potential victims, all Jews, which illustrates that he had a precise definition of success in his mind.

b. The Montana Freeman

In relation to the incident directly below: "According to Sheriff Smith, the tip said that the Freeman were planning to kidnap a judge, try him in their court, sentence him to hanging and videotape the proceeding."³⁷⁰ Note how specific this plan was in terms of target, judgment, execution, etc.³⁷¹

"On March 3, 1995, a Musselshell County deputy stopped two Freeman, Dale Jacobi and Frank Ellena, for not having license plates on their pickup. Nor did they have a driver's license. The deputy asked the men to get out of the pickup and discovered that both were carrying concealed weapons without permits. Searching Ellena, deputies discovered what was later revealed to be a hand-drawn map of Jordan [Montana], with the office and home of Nick Murnion circled. In the car, they found a considerable supply of guns and ammunition (including bullets that could pierce body armor), 30 sets of plastic-strip handcuffs, some \$60,000 in gold and silver, about \$26,000 in cash, duct tape, a video camera, a 35mm Minolta camera, and various pieces of radio telecommunications gear. Deputies were sure they had come across part of the kidnapping crew."³⁷²

2. Suboptimal Outcome - Target and/or Timing: List all of the arguments for a definition of success that allows for a *suboptimal outcome*; specifically that the destruction of an incorrect target and/or an incorrect timing of attack is acceptable to the leadership.

a. Hutaree Militia

For the Hutaree militia group a successful operation was not as specific and pre-determined as was, for example, the case with the Order. The Hutarees had broad targeting criteria, requiring only that the victim be a be "state or local law enforcement; someone deemed a 'foot soldier' of the federal government. This included the federal law enforcement agency personnel and non-armed employees, participants in the New World Order, and anyone who did not share the group's belief system."³⁷³ Thus, one can argue that, for Hutaree, the definition of success included a suboptimal outcome with respect to target and/or timing. According to the federal prosecutors, Hutaree members wanted to arrange "a live training session in which the group's leader, David Stone, instructed his followers to kill anyone they came across who didn't submit to their demands."³⁷⁴ Stone wished to have "deadly devices that could harm several [random] people at once and shoot off projectiles to penetrate armor and vehicles."³⁷⁵

The Hutaree militia group's targeting criteria was broad, random and not predetermined. The only requirement was death for a wide range of potential victim types.

³⁶⁹ Ibid, p. 192.

³⁷⁰ Mark Pitcavage, "Every Man a King: The Rise and Fall of the Montana Freeman," ADL, last modified May 6, 1996. Available at: <http://www.adl.org/mwd/freemen.asp>

³⁷¹ NOTE: See incident immediately below.

³⁷² Ibid.

³⁷³ United States District Court, Eastern District of Michigan, Southern Division, Indictment, USA vs. David Brian Stone. (March 23, 2010). Available at: <http://upload.wikimedia.org/wikipedia/commons/f/fc/Federal-hutaree-indictment-mar-2010.pdf>

³⁷⁴ Claudia Boyd-Barrett and Mark Reiter, "Hutaree stockpiled weapons, made hit list, prosecutors says;" *Toledo Blade* (Ohio), April 1, 2010. Available at: <http://www.toledoblade.com/local/2010/04/01/Hutaree-stockpiled-weapons-made-hit-list-prosecutor-says.html>

³⁷⁵ Claudia Boyd-Barrett and Mark Reiter, "Hutaree stockpiled weapons."

b. CSA

On June 30, 1984, a member of the CSA (The Covenant, The Sword, The Arm of the Lord), Richard Wayne Snell, shot and killed a black police officer. Snell was also sentenced to die for the 1983 execution-style murder of a pawn shop owner in Texarkana – whom he mistakenly thought to be Jewish.³⁷⁶ Significantly, Snell also had plans to bomb the Oklahoma City Murrah Federal Building “in opposition to what he regarded as the demonic and oppressive actions of the US government.”³⁷⁷ These two examples illustrate Snell’s perception of success for a suboptimal outcome with regard to target and/or timing. Snell chose to kill both the shop owner and the police officer; however, he had already determined that he would bomb the Murrah building. Killing the shop owner only jeopardized the bombing mission; it was unnecessary from any tactical or strategic reason. While Snell may have felt that the police officer would have arrested him on back charges related to outstanding car payments to a bank, he certainly could have gotten out of jail with at most a few months served. Then he could have proceeded with his bombing plan. He perceived that the killings of an assumed Jew and a black police officer were more important to his overall strategic vision of his role to combat the government and non-whites than was keeping a low profile and moving forward with the bombing mission. His flexibility allowed him to prioritize the immediate killings over the long-term mission of the bombing.

c. Minnesota Patriots Council

Four members of the Minnesota Patriots Council were convicted for the attempt to assassinate local and federal law enforcement officials with ricin.³⁷⁸ What is salient in this case is that the group showed no preferences for precise targets—the outcome of the attack was uncertain in this critical regard.

d. The Covert Group

The failed incident with Georgia’s “Covert Group” is another example. Samuel Crump and his associates planned to deposit two pounds of ricin simultaneously on highways in five different cities, letting the passing cars spread it through the air.³⁷⁹ There was no specified target group in this case.

3. *Suboptimal Outcome - “Fizzle” Yield*: List all of the arguments for a definition of success that includes a *suboptimal outcome*; specifically a detonation of the nuclear weapon resulting in a *fizzle yield* (note that such an event, for our purposes, does *not* result in the release of significant quantities of radioisotopes; i.e., the “dud” does not result in a “dirty bomb” type release; this category also implies that the group would settle for incorrect target/timing in addition to settling for a fizzle).

Based on the group’s understanding of their mission, while a suboptimal outcome in terms of targeting or timing could be accepted as adjustments based on divine will, they would likely not view a fizzle as success.

4. Having now investigated the evidence, identify which one of the three—i.e., 1) a specific outcome, 2) a suboptimal outcome (with incorrect target and/or timing but not a fizzle), or 3) a suboptimal outcome (with a fizzle yield and/or incorrect target/timing)—is the most likely outcome that the leadership would regard as a “success” and explain why.

Suboptimal Outcome - Target and/or Timing: The RDYC, like most militias, have specific strategic outcomes in mind. However, their religious beliefs give divine sanction to unforeseen changes in their mission, i.e., Yahweh is guiding them. Thus, unexpected outcomes are acceptable.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

³⁷⁶ “Elohim City,” ADL, August 9, 2002. Available at:

http://www.adl.org/learn/ext_us/Elohim.asp?LEARN_Cat=Extremism&LEARN_SubCat=Extremism_in_America&picked=3&item=ec

³⁷⁷ Mark Juergensmeyer, *Terror In The Mind of God: The Global Rise of religious Violence*, (Berkley: University of California, 2001), p.136.

³⁷⁸ Tucker, *Toxic Terror*, p. 159.

³⁷⁹ FBI Complaint, United States District Court, Northern District of Georgia, United States of America v. Samuel Crump, Case Number: 2:11-MJ-103, (November 1, 2011), p. 6.

No.

6. Consider how this factor—the leadership's preference for success—might change in the next five (5) years.

If the group's constituency changes, the leadership's preference for success might change in the short-term. For instance, if they enjoy greater support for their actions from a particular constituency, they may be less likely to take risks vis-a-vis having a nuclear device detonate in an area that is not predetermined, i.e. they would not want to alienate their constituency by having a weapon detonate or even to have fissile material in their constituencies' environment. Conversely, if the group feels further alienation and is further radicalized, i.e. less support from a constituency, they may be more tolerant of having a nuclear device detonate at a time or place where the victims were not the original targets of the attack.

C. The Importance to the Leadership of Flexibility in the Field

1. *High Importance*: List all of the arguments you can identify for flexibility in the field being of high importance to leadership.

It is very important for the leadership of militia groups to have high flexibility in the field. Leadership is aware of likely police surveillances and needs to be flexible enough to be able to escape at any time.

a. The Order

In the case of the Order, the fact that they carried out their operations in two states (California and Colorado) illustrates flexibility in terms of traversing large geographic distances, which likely entails frequent direction changes due to the presence of law enforcement. Moreover, Robert Mathews, the head of the Order, retained a list of men who he targeted, and all were prominent Jewish figures.³⁸⁰ Thus, at any given time, one of the Jewish targets might have been suddenly vulnerable and, obviously, a successful assassination would require a flexible response by the group to ensure the target was eliminated.

Additionally, the Order reportedly had connections with the Syrian government.³⁸¹ Discussions revolved around Syrian financial backing in exchange for the killing of Jews by members of the Order.³⁸² As a racist white supremacist group, accepting money from non-white people because it advances higher priorities, demonstrates the importance of flexibility in the field for the leadership.

Another element illustrating the importance of flexibility in the field for the leadership of the Order is the fact that the perpetrators were able to escape after both the assassination of Alan Berg and the Brinks' armored truck heist. This success was achieved despite high-risk levels and relatively risky operational requirements. Moreover, all members of the Order had contact with people connected to the radical right-wing throughout the country. These connections are how the group would find new recruits and find sanctuary when necessary.

b. Alaska Peacekeepers Militia

The leadership of the Alaska Peacemakers Militia (Schaeffer Cox also known as Francis August Schaeffer Cox) demonstrated medium levels of tolerance for uncertainty, by letting the members develop and share their ideas for potential operations with other members of the group. These ideas could have been proposed at any time or location. Openness to such considerations in a variety of environments, i.e. if the group was traveling in another town or state, is likely to be indicative of genuine willingness to at least consider conducting a suggested operation despite its impromptu characteristics vis-à-vis time and space.

³⁸⁰ Flynn, *The Silent Brotherhood*, p. 192.

³⁸¹ Matthews reportedly gave Duey specific instructions on how to properly greet Syrian officials and the manner Syrians are accustomed to. Kevin Flynn, *The Silent Brotherhood: Inside America's Racist Underground*, (New York: The Free Press, 1989), p. 323.

³⁸² Ibid.

c. CSA

"In addition to training themselves, offers survival training to the public, either on the settlement or at various locations throughout the United States."³⁸³ CSA also had members from non-white groups, including "communists, Jews, blacks, halfbreed Mongoloid sinners, oriental, non-white, IRS, the Federal Reserve System, and the Trilateral Commission as their advisories."³⁸⁴ They included individuals from 'unacceptable races' in order to facilitate what they perceived to be more 'important' deals.

d. The Covert Group

The members of Covert Group, Samuel Crump and his associates also had a high perception of flexibility in field. Their plan to employ ricin was expansive and it included five different cities so that they could change their target location under unexpected circumstances.³⁸⁵

2. *Medium Importance*: List all of the arguments you can identify for flexibility in the field being of medium importance to leadership.

No evidence. Indeterminate.

3. *Low Importance*: List all of the arguments you can identify for flexibility in the field being of low importance to leadership.

a. Militia of Montana

Militia of Montana's leader "John Trochmann speaks mainly at regional gun shows now, seldom traveling outside the Pacific Northwest."³⁸⁶ This may indicate his unease with travel and other activities that require flexibility in planning and execution.

4. Having now investigated the evidence for flexibility in the field being of either high, medium or low importance to the leadership, identify which one of the three preference levels is most likely and explain why.

High: RDYC, like most militia groups, perceives that flexibility in the field is a requirement given that: 1) they perceive law enforcement as omnipresent [e.g., the need to "pull up stakes" at any given moment]; 2) in contrast to #1, the group may perceive that law-enforcement is lax, sympathetic, or understaffed and thus the group can engage in a greater variety of actions; 3) their operational objectives often requiring great allowances for last minute changes and overall reprioritization of tactical objectives; 4) in some cases the group may need to travel great distances in order to accomplish various missions. Entry into new or multiple territories demands that changes be made quickly.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor—the importance to the leadership of flexibility in the field—might likely change in the next five (5) years.

This is not likely to change.

D. The Leadership's Perception(s) of Previous Command and Control Outcomes

1. Has the group been engaged in – or aware of – major (non-nuclear) actions where the C&C arrangements of the group were predetermined³⁸⁷?

³⁸³ US Department of Justice, Federal Bureau of Investigation, Kansas City, Missouri, File: 100-HQ-487200, (July 2, 1982), p. 2.

³⁸⁴ Ibid.

³⁸⁵ FBI Complaint, United States District Court, Northern District of Georgia, United States of America v. Samuel Crump, Case Number: 2:11-MJ-103, (November 1, 2011), p. 6.

³⁸⁶ "Militia of Montana;" ADL. No date. Available at: http://www.adl.org/learn/ext_us/mom.asp?LEARN_Cat=Extremism&LEARN_SubCat=Extremism_in_America&xpicked=3&item=mom

No.

Failure: List all of the arguments for the leadership having the perception that *pre-determined* previous command and control arrangements have resulted in failure.

None.

Success: List all of the arguments for the leadership having the perception that *pre-determined* previous command and control arrangements have resulted in success.

None.

Indeterminate: List all of the arguments for the leadership having the perception that previous *pre-determined* command and control arrangements had an *indeterminate* effect.

None.

2. Has the group been engaged in – or aware of – major (non-nuclear) actions where the C&C arrangements of the group were assertive³⁸⁸?

Yes.

Failure: List all of the arguments for the leadership having the perception that *assertive* command and control arrangements have resulted in failure.

a. Ku Klux Klan – Fifth Era

In his capacity as grand dragon of the Michigan Ku Klux Klan, Robert Miles, who would later help initiate the militia movement, had been betrayed by fellow Klansmen; his plot to bomb school buses was interdicted and he served several years in prison.³⁸⁹ Together with Louis Beam they sought to develop an organizational structure immune to betrayal and, consequently, independent of any kind of overt connection with like-minded groups. Consequently, unlike others in the radical right-wing movement—such as the influential leader of the National Alliance and author of *The Turner Diaries* William Pierce—Beam and Miles rejected the traditional pyramid structure of organizations and its vision of single leadership.³⁹⁰ Instead, in a 1983 publication of the Inter-Klan Newsletter, Beam wrote the eponymous and seminal issue entitled “Leaderless Resistance.”³⁹¹ Leonard Zeskind explains Beam’s idea as an “underground [that] would be

³⁸⁷ “Pre-determined” is defined as preassigned protocols and instructions given to group personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon). Pre-determined in this context means that group personnel responsible for transport, operational security and detonation of the weapon must strictly adhere to prearranged operational behavior regardless of events that transpire in the field (although, obviously, pre-planned behavior can anticipate certain events and allow for pre-planned actions in response). In short, in this “pre-determined” environment, personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon) are acting as pre-programmed (nuclear-armed) automatons. None of their actions, insofar as they have control over them, should run counter to the leadership’s pre-conceived plan of how events can and should play out.

³⁸⁸ “Assertive” is defined as a command system in which the leadership maintains control (either in person or, more likely, through obedient subordinates in contact with the leadership from the field) over relevant aspects of the operation (e.g., in the context of nuclear weapons, in the weapon’s transportation and detonation). While preplanning may have occurred, alterations in the strategic environment allow for the leadership to make changes “on the fly.” For example, missions can be called off altogether or adjustments can be made in targeting; however, all such modifications can only be initiated by the leadership. Moreover, “assertive” arrangements can require that in-the-field subordinates must contact leadership at every step of the mission to receive further instructions (e.g., they may not even know that they are transporting a nuclear weapon and what the target is prior to some point within the mission itself [by the way, apart from the plane’s pilot, this was the case for the *Enola Gay*’s Hiroshima mission]).

³⁸⁹ Leonard Zeskind, *Blood and Politics* (New York, New York: Farrar Straus Giroux, 2009), p. 93.

³⁹⁰ Pierce’s *Turner Diaries* portrayed one man’s struggle against the oppressive System. However, his efforts were part of a larger “complex multilayered apparatus, a ‘legal’ political front operated on one hand and an illegal armed front operated on the other, both under a single military-style struggle.” Zeskind, *Blood and Politics*, p. 93.

³⁹¹ Louis Beam, “Leaderless Resistance,” *Inter-Klan Newsletter* (Hayden Lake, ID: AKIA Publications, 1983). Available at: <http://www-personal.umich.edu/~satran/PolSci%2006/Wk%2011-1%20Terrorism%20Networks%20leaderless-resistance.pdf>

composed of cells that already understood their mission, safely separated from one another and without a central tactical leadership.”³⁹²

Success: List all of the arguments for the leadership having the perception that previous *assertive* command and control arrangements have resulted in success.

a. The Order

With regard to the Order, given that the success of both major operations (i.e., the assassination of the Alan Berg, and the Brinks armored truck robbery) was associated with assertive command and control arrangement, one can argue that the perception is that the assertive command and control operations would likely continue to be successful.

Mathews participated and supervised both operations. In the case of Berg, Matthews unilaterally decided that Alan Berg would die even after protest from high-ranking subordinates Randy Duey and Denver Parmenter.³⁹³ Although during the Brinks armored truck robbery incident the command and control was not as effective (i.e., group members were unexpectedly separated) as with the assassination of Berg, it nonetheless was a successful operation.

Bruce Pierce fired warning shots through the windshield of the truck without explicit orders. Similarly, Pierce fired his weapon again at a female guard as a warning without explicit orders while the men made their getaway.³⁹⁴ Regardless, in both cases members carried out the operation and successfully escaped from the scene.³⁹⁵

Indeterminate: List all of the arguments for the leadership having the perception that previous *assertive* command and control arrangements had an *indeterminate* effect.

None.

3. Has the group been engaged in – or aware of – major (non-nuclear) actions where the C&C arrangements of the group were delegative^{396? 397}

Yes.

Failure: List all of the arguments for the leadership having the perception that *delegative* command and control arrangements have resulted in failure.

None.

Success: List all of the arguments for the leadership having the perception that previous *delegative* command and control arrangements have resulted in success.

a. Alaska Peacemakers Militia

Although Schaeffer Cox was ostensibly the central charismatic head of the Alaska Peacemakers Militia, a high degree of autonomy prevailed among five other group members. His style of leadership was not

³⁹² Zuskind, *Blood and Politics*, p. 93.

³⁹³ Flynn, *The Silent Brotherhood*, p. 192.

³⁹⁴ Ibid, pp. 234, 237.

³⁹⁵ See Kevin Flynn, *The Silent Brotherhood: Inside America's Racist Underground*, (New York: The Free Press, 1989).

³⁹⁶ “Delegative” is defined as a system in which the leadership has empowered subordinates to make key decisions if necessary in the conduct of the operation (in the nuclear context, this would refer mainly to the weapon’s transport, targeting and detonation). In this case, the leadership may maintain assertive control over the weapon with authorization (e.g., devolution) of command given to subordinates in the event of certain predefined occurrences (for example, if deputies in the field lose communication with the leadership). Moving farther along the spectrum of delegation, leaders may simply allow deputies to act as they see fit in the field as the mission progresses (e.g., the football term of “make an audible” – when a quarterback makes a change of play at the line of scrimmage based on what the defense is showing). In short, when compared to the other two types of arrangements considered in the profile (i.e., “pre-determined” and “assertive”) “delegative” arrangements give subordinates the greatest flexibility in the field.

³⁹⁷ This section can be completed even if the previous one (or two) has been completed, for instance in cases where a group has utilized Pre-determined and/or Assertive C&C and delegative arrangements in previous attacks.

autocratic; plots were discussed openly. Inner-core militia members such as Karen Vernon had a say in the execution of the group's plans. They also devised and executed their own plans. However, this conclusion relates to the militia's inner-core members, not to the presumed larger outer-core members because they were not included in the plot.

b. The Order

After the Brinks armored truck robbery, the Order's inner circle demanded that Robert Mathews delegate more power to them. Mathews acquiesced to these demands. This may indicate a change in perception by Mathews with regard to optimal command and control arrangements.

c. M.O.M.

One of Militia of Montana's leaders advised other groups to operate underground as "phantoms;" they should embrace Louis Beam's "leaderless resistance."³⁹⁸

Indeterminate: List all of the arguments for the leadership having the perception that previous *delegative* command and control arrangements had an indeterminate effect.

None.

4. Leadership Perception of Outcomes Based on Command and Control Arrangement Type

Based on their past experience, does the leadership perceive that pre-determined command and control arrangements will result in: 1) *success* or, 2) *failure* or, 3) does the leadership perceive that the effects of predetermined command and control arrangements are *indeterminate*?

Indeterminate – no previous predetermined experiences.

Does the leadership perceive that assertive command and control arrangements will result in: 1) *success* or, 2) *failure* or, 3) do they perceive that the effects of assertive command and control arrangements are *indeterminate*?

Assertive: RDYC's successful operational outcomes to date have been associated with assertive command and control. Moreover, the leader of RDYC has a strong, domineering, and manipulative leadership style. In short, given the groups previous operational outcomes and the personality of the group leader, they are likely to associate assertive control with success.

Does the leadership perceive that delegative command and control arrangements will result in: 1) *success* or, 2) *failure* or, 3) do they perceive that the effects of delegative command and control arrangements are *indeterminate*?

Success.

5. Is there something particular to the group that makes this factor—leadership perception of previous command and control arrangements— more or less important relative to all of the other nine factors?

No.

6. Consider how this factor might likely change in the next five (5) years.

Any knowledge of command and control outcomes in situations that approximate what the leadership is contemplating would likely affect their perception of command and control.

E. The Leadership's Perception: Complexity of Getting a Working Weapon to the Target (U.S.)

1. *High Complexity:* List all of the arguments for the leadership having the perception that getting a working weapon to the target will involve a high level of complexity.

None.

³⁹⁸ Joshua D. Freilich, *American Militias: State-Level Variations in Militia Activities* (New York: LFB Scholarly Publishing LLC, 2003), p. 14.

2. *Medium Complexity*: List all of the arguments for the leadership having the perception that getting a working weapon to the target will involve a medium level of complexity.

None.

3. *Low Complexity*: List all of the arguments for the leadership having the perception that getting a working weapon to the target will involve a low level of complexity.

a. The Order

The Order was very mobile. It successfully carried out several operations in a widespread geographical area. Thus, one can argue that the leadership's perception of complexity of getting a working weapon to the target was low.

b. Hutaree Militia

In David Stones' mobile home and some other members of the Hutaree militia group "an arsenal of weapons, ammunition, and materials that could be used to make bombs and create shrapnel"³⁹⁹ was produced. Thus, Stone's perception of complexity of getting a weapon to the target could have been low because he was able to get all the material into his home undetected.

4. Having now investigated the evidence for a high, medium and low perceived complexity of getting a working weapon to the target, identify which one of these three leadership perceptions is most likely and explain why.

Low Complexity: RDYC's has already engaged in several complex operations and each one has been perceived as successful. Moreover, members of the group have strong skill sets that they interpret as demonstrating unusually high levels of efficacy (e.g., problem solving). Finally, members of RDYC have both general military backgrounds as well as combat experience. In short, the group perceives that it can get any job done once they have committed to it, in spite of some apprehensiveness about the technological capabilities of their adversaries.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor might likely change in the next five (5) years.

Loss of some members with an inability to replace them with other people with similar skills, competency and efficacy could impact this factor in the short term.

F. Leadership's Perception of the Trustworthiness of Relevant Group Members

1. *High Trustworthiness*: List all of the arguments for the leadership having the perception of high trustworthiness of relevant group members.

a. Hutaree Militia

Within the Hutaree group, four members of a family, i.e. David Stone's family, were working together.

b. M.O.M.

Among the founders of the Militia of Montana, family ties were also tight. The group was formed by two brothers, John and David Trochmann, and David's son, Randy.⁴⁰⁰

c. The Montana Freeman

There were some family ties among founders of The Montana Freeman, Schweitzer, Skurdal, Daniel Petersen and his wife Cheryl.⁴⁰¹ While family ties can engender greater trust, this is not necessarily the case

³⁹⁹ Claudia Boyd-Barrett and Mark Reiter, "Hutaree stockpiled weapons, made hit list, prosecutors says," *Toledo Blade* (Ohio), April 1, 2010. Available at: <http://www.toledoblade.com/local/2010/04/01/Hutaree-stockpiled-weapons-made-hit-list-prosecutor-says.html>

⁴⁰⁰ "Militia of Montana."

– as seen the case of the RDYC, the leader ended up killing his brother as a traitor. Nonetheless, the remaining family ties in the RDYC appeared to be fairly strong.

2. Medium Trustworthiness: List all of the arguments for the leadership having the perception of medium trustworthiness of relevant group members.

a. Alaska Peacemakers Militia

The leadership of the Alaska Peacemakers Militia (Schaeffer Cox) demonstrated medium levels of tolerance of uncertainty, by letting the members develop and share their ideas for potential operations with other members of the group.

b. The Order

Members of the Order had different backgrounds; some of them “were Odinist or belonged to several Klan and [Christian] Identity groups as well as the National Alliance. The different beliefs and organizational backgrounds of the Order members illustrate the diversity of viewpoints in the movement.”⁴⁰² Thus, leadership likely had a medium amount of trust in its members, since their loyalties were divided among several groups.

Yet, Matthews did not allow the group to operate entirely as an independent cell as its members represented and maintained contact with various right-wing extremist groups like Knights of Ku Klux Klan, Posse Comitatus and the Covenant, the Sword and the Arm of the Lord (CSA).

Order members were paid. This can be considered as an attempt by the leadership to ensure loyalty. Members were paid a salary of \$10,000 every six months and there was a \$30,000 bonus that went to each member who participated in the robbery. Members did not have a separate job outside of the group; rather, the Order was their job.⁴⁰³

At first, Mathews could take unilateral action. For instance, as mentioned earlier in this profile, for the assassination of Alan Berg, he overruled challenges to his decision to kill Berg. However, inner circle members voiced dissatisfaction with this assertive approach.

Overall, in the radical right-wing and some militia groups, there is not a complete consensus on who is a hero and what the role of violence in the movement is.⁴⁰⁴ Logically, this may impact the level of trustworthiness among group members, especially those who have not been tested or “vetted.”

c. Various

Two months after the siege at Ruby Ridge ended leaders, activists, and lobbyists from extreme and licit far-right wing communities met in Estes Park, Colorado, for a three-day meeting. Organized by the Christian Identity Pastor Pete Peters, a total of 160 “Christian Men” attended—including a large contingency of Pastor Peters’ congregation and members of Aryan Nations (headed by the aging Richard Butler).⁴⁰⁵ Christian Identity adherents were convinced that they would soon be fighting for God in the final battle against evil, and they were joined by NRA gun lobbyists familiar with Capitol Hill. Louis Beam attended along with elements of the “pro-life” anti-abortion Operation Rescue and sundry other single issue right-wing extremists. One thing that all of the participants agreed on was that the federal siege at Ruby Ridge represented final proof that the US government was out of control. Despite a decade-long history of

⁴⁰¹ Pitcavage, “Every Man a King.”

⁴⁰² Betty A. Dobratz and Stephanie L. Shanks-Meile, *The White Separatist Movement in the United States* (Baltimore: John Hopkins University Press, 2000), p. 79.

⁴⁰³ Flynn, *The Silent Brotherhood*, p. 249.

⁴⁰⁴ Dobratz and Shanks-Meile, *The White Separatist Movement*, p. 196.

⁴⁰⁵ Zuskind, *Blood and Politics*, p. 311.

infighting, “the meeting managed to tacitly unite disparate ... factions in a common front against the federal government and the New World Order.”⁴⁰⁶

3. *Low Trustworthiness:* List all of the arguments for the leadership having the perception of low trustworthiness of relevant group members.

a. The Order

Within the Order, the general level of trustworthiness among group members writ large was medium; however the inner circle was a different matter. There was tension between Mathews and Pierce for most of the time the organization operated. There were occasional flare ups and arguments. The most notable one followed the large armored truck heist in which Mathews subsequently conceded more power to the rest of his inner circle (explored earlier).⁴⁰⁷

More importantly, Tom Martinez betrayed the Order, in general, and Mathews, specifically, by helping FBI agents locate him.⁴⁰⁸

b. Hutaree Militia

Trustworthiness among different discrete groups is low. In one case, although several members of the Hutaree group had occasionally trained with members of the Southeast Michigan Volunteer Militia group, the latter group did not help Hutaree members when they needed assistance in fleeing law enforcement. “Michael Lackomar, the leader of Southeast Michigan Volunteer Militia, said several members of the Hutaree [militia], who have trained with his group on occasion, showed up on the doorstep of one of his colleagues shortly after the raid. ‘They were asking for a place to hide as it were and he wasn’t willing to assist them in that manner,’ Lackomar said.”

c. M.O.M.

The Militia of Montana’s reaction towards the arrest of members of the Montana Freeman group demonstrates low trustworthiness between separate militia groups. “Randy Trochmann quickly issued a press release denying any links between Militia of Montana and the Montana Freeman, saying that John Trochmann had traveled across the state to Musselshell County to help negotiate between the Freeman and local law enforcement.”⁴⁰⁹ “...Montana Freeman ended up bringing down upon themselves the enmity not only of the hated federal government, but friends and neighbors as well.”⁴¹⁰ Members of the Montana Freeman were issuing death threats—even against John Trochmann. “Skurdal began to issue threats; he was not issuing them against faceless officials, but against the friends and relatives of people in town. Some people didn’t have a problem with the Montana Freeman. ‘They wave. We wave,’ explained one neighbor. ‘As long as you’re not government, they won’t bother you.’ But for most others, life among the Freeman was not so carefree.”⁴¹¹

4. Having now investigated the evidence for the leadership perceiving a high, medium and low level of trustworthiness of the relevant personnel, identify which one of these three leadership perceptions is most likely and explain why.

Medium: RDYC’s leadership has a medium level of perceived group member trustworthiness. The group itself, as a whole, is not factionalized. For the most part, members all follow their leader implicitly. However, the leader of RDYC, in a dispute over group direction and other matters, killed his brother who was also a member of RDYC. Thus, while the leader is generally trustful, he is prone to suspicions and keeps a watchful eye on his group.

⁴⁰⁶ Mattias Gardell, *Gods of the Blood: The Pagan Revival and White Separatism* (Durham, North Carolina: Duke University Press, 2003), p. 59.

⁴⁰⁷ Flynn, *The Silent Brotherhood*, p. 248.

⁴⁰⁸ Dobratz and Shanks-Meile, *The White Separatist Movement*, p. 193.

⁴⁰⁹ “Militia of Montana.”

⁴¹⁰ Pitcavage, “Every Man a King.”

⁴¹¹ Ibid.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor might likely change in the next five (5) years.

Returning US military veterans who end up in militias may demonstrate higher levels of trustworthiness than non-veterans.

US economic decline and consequent higher levels of poverty and, in general, the formation of social conditions that lead to lower levels of trust amongst group member—both current and potential leaders.

Renewed and more effective law enforcement capabilities vis-à-vis recruiting informants.

G. The Leadership's Perception of the Reliability and Security of Communications

1. *High Reliability and Security*: List all of the arguments for the leadership having the perception of a high level of reliability and security of communications..

a. The Order

In the Order the leadership likely had a high regard for their communications capabilities.

They had a communications hub put together by the group that they called the "Message Center," which they used to communicate between different parts of the group if they were scattered about the country. Someone would call to leave a message, and then when someone else called, if there was a message waiting for them it would be relayed.⁴¹²

2. *Medium Reliability and Security*: List all of the arguments for the leadership having the perception of a medium level of reliability and security of communications.

a. Alaska Peacekeeper Militia

The Alaska Peacekeeper Militia group used Twitter as a communication tool, "The signal for the attacks, Cox said, would come via his Twitter account — "00SchaefferCox.""⁴¹³ It should be noted that members of the group used a cipher when communicating via Twitter.

b. M.O.M.

"Randy Trochmann edited Militia of Montana's journal, *Taking Aim*, which discussed the New World Order conspiracy and its encroachment on every aspect of daily life. The publication was widely read in militia circles, and its popularity solidified Militia of Montana's place in the vanguard of the movement. The group also published a catalog that stocked everything from caps and fatigue jackets to guides on improvising munitions and escaping from police custody... The Militia of Montana catalog also offered more specific training materials, including weapons breakdown manuals; 'Techniques for Harassment,' a video presenting the latest refinements of that art; and 'How to Disappear Completely,' which provided would-be revolutionaries with the skills to craft new identities."⁴¹⁴

The Militia of Montana advertised their publication, according to their website: "For more educational information send for a subscription of *Taking Aim*, for only \$25.00 for 12 issues or, \$15.00 for six issues."⁴¹⁵ This illustrates they trust the reliability and security of the written communications (albeit for propaganda and recruitment messages).

"Militia of Montana effectively used the Internet as Y2K loomed: the organization's website offered much of its product catalog for sale, along with works like "The Road Back," which was published and promoted by

⁴¹² Flynn, *The Silent Brotherhood*, pp. 276-277.

⁴¹³ Booth Gunter and Leah Nelson, "Alaska Militia Leader's Revolution Falls Flat", *Intelligence Report*, Summer 2011, Issue Number: 142.

⁴¹⁴ "Militia of Montana."

⁴¹⁵ Kenneth C. Maue, "What is the Militia," The Militia of Montana Website, Available at: <http://www.militiaofmontana.com/whomom.htm>

Liberty Lobby's Noontide Press. Militia of Montana's home page also proved helpful in promoting John's [Trochmann] speaking engagements. Randy Trochmann, in addition to acting as editor of *Taking Aim* and handling most of Militia of Montana's day-to-day operations, also moderated an e-mail group in which patriots could exchange information, share tips on survival and debate the best responses to current threats."⁴¹⁶ Randy's use of the internet might have demonstrated his confidence in the group's communications capabilities, but this was not in an operational context, so the evidentiary value of the example is limited.

c. The Montana Freeman

The Freeman were setting up "a ham radio antenna" to facilitate their communications.⁴¹⁷

3. Low Reliability and Security: List all of the arguments for the leadership having the perception of a low level of reliability and security of communications.

"Some militia members [unspecified] were distrustful of technology since it not only led to 'more advanced forms of technological governmental surveillance, and thus, control, but ... also ... to spiritual deficiencies among individuals (*sic*).'"⁴¹⁸

4. Having now investigated the evidence for the leadership perceiving a high, medium and low level of reliability and security of communications, identify which of these leadership perceptions is most likely and explain why.

High: RDYC is extremely cautious with its communications and thus, the few tools that they utilize are all highly secure. Moreover, given that three members have recent military backgrounds, they are up to date on the latest communication technologies.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor might likely change in the next five (5) years.

Advances in technology and communications, in general, could change the outcome in the near future. Moreover, an increase or decrease in governmental surveillance of US citizens in general might have an impact. For example, national perceptions of higher surveillance over the US population writ large could give the perception that surveillance has increased as well for illicit groups and therefore lower trust in the security of communications.

H. The Leadership's Perception of Group Competency

1. **High Competency:** List all of the arguments for the leadership having the perception of high group competency.

a. Alaska Peacekeeper Militia

The leadership's perception of the Alaska Peacekeeper Militia's competency was high. For example, "[group leader Schaeffer] Cox said the Alaska Peacemakers Militia includes about 1,000 people throughout Alaska who have gone through a two-day instruction session to learn standardized techniques, with the heaviest representation in the Interior [of the state]. There are many more people—perhaps as many as a total of 3,500—who Cox said have lesser levels of training and participation."⁴¹⁹

⁴¹⁶ Ibid.

⁴¹⁷ Pitcavage, "Every Man a King."

⁴¹⁸ Freilich, *American Militias*, p. 75.

⁴¹⁹ Jeff Richardson, "Fairbanks militia says it is focused on community welfare, liberty and rights," *News Miner*, April 11, 2010. Available at: www.newsminer.com/view/full_story/7035879/article-Alaska-Peacemakers-Militia-says-it-is-focused-on-community-welfare--protection-of-liberty-and-rights?instance=home_lead_story

b. The Order

The Order purchased a large stretch of land to build a training camp.⁴²⁰ Moreover, the group had various technical skills:

- Counterfeiting Currency: The group had the expertise and equipment to create counterfeited currency. This would later give way to the production of falsified identification.⁴²¹
- Military Training: The group had the capacity to train their recruits in military and survivalist skills.⁴²²
- Explosives: Although the group never used explosives during the commission of a major attack, they still dedicated time to acquiring some sort of bomb-making skill and were successful in acquiring it.⁴²³

Mathews likely perceived that this level of competency was high because he recruited certain people for their expertise:

- Robert Merki was brought into the organization because he initially had a history in counterfeiting currency. He later repurposed this skill to create falsified identification.⁴²⁴
- Randall Rader had expertise in survival and combat training and was brought on specifically to put together and run a training camp for Mathews' organization.
- Ardie McBearty was proficient in the use of a voice analyzer that the group would use to screen new recruits to make sure they were not informants.⁴²⁵
- Richard Scutari was a martial arts expert who would help train the men.⁴²⁶

Additionally, the Order had several men with military experience. In both of the group's big operations, i.e., the Berg killing and especially the Brinks armored truck heist, the operators successfully fled the scene despite several obstacles.

c. Hutaree Militia

The leaderships of other groups in the militia movement writ large also had perceptions of group competency. For instance, the Hutaree militia planned to use "'improvised explosive devices' and 'explosively formed projectiles' that, authorities say, qualify as weapons of mass destruction."⁴²⁷ They were allegedly planning to "kill a police office in Michigan and then stage a second attack on the funeral, using landmines and roadside bombs."⁴²⁸

d. M.O.M.

According to John Trochmann, Militia of Montana's agenda was: "Combat the New World Order, educate people, and help them organize to resist the evil government. He claimed seven million followers of the militia movements was 'a conservative estimate.'"⁴²⁹ Additionally, both Trochmanns had military experience. "I had good friends in the military that were black. We have good friends in the militia that are black. They share the same enemy that we do. It's about time we forgot differences."⁴³⁰ If true, this suggests that the Trochmanns understood that other ethnic groups have, on average, similar IQs to "white" people; however, it is unclear if this is the belief held by the Trochmanns.

⁴²⁰ Flynn, *The Silent Brotherhood*, pp. 254, 297, 323.

⁴²¹ Ibid, p. 295.

⁴²² Ibid, p. 194.

⁴²³ Ibid, pp.156-157.

⁴²⁴ Ibid, p. 295.

⁴²⁵ Ibid, p. 272.

⁴²⁶ Ibid, p. xiii.

⁴²⁷ Mark Guarino, "Hutaree militia arrests point to tripling of militias since 2008," *The Christian Science Monitor*, March 29, 2010. Available at: <http://www.csmonitor.com/USA/Justice/2010/0329/Hutaree-militia-arrests-point-to-tripling-of-militias-since-2008>

⁴²⁸ "US 'Christian militants' charged after FBI raids."

⁴²⁹ David A. Neiwert, *In God's Country: The Patriot Movement and the Pacific Northwest*, (Washington: Washington State University Press, 1999), p. 75.

⁴³⁰ Neiwert, *In God's Country*, pp. 83, 84.

*"Milicias [in general] are more likely to recruit military veterans and war veterans, states with higher concentrations of such war veterans ... would have higher levels of militia activity ... many of the most prominent leaders of the militia movement are veterans of the armed forces. For instance, Mark Koerneke, Norman Olson, Ray Southwell, John Trochmann, and Lynn Van Huizen have all served in our nation's military."*⁴³¹

e. CSA

The CSA (The Covenant, The Sword, The Arm of the Lord), in preparation for their belief that society will soon collapse in turmoil, "stockpiles food and weapons and trains themselves in military and survival procedures." They were also willing to train ordinary people, "The training includes instruction on organization, survival techniques, and para-military topics. Also taught are firearms and marksmanship, repelling, foraging for food, erection of such obstacles as punji sticks and barbed wire to detour looters, urban warfare, military field craft, national forest survival, home defense Christian martial arts, Christian military truths (sic), nuclear survival and tax protesting."⁴³²

2. Medium Competency: List all of the arguments for the leader's perception of medium group competency.

a. The Order

"While he [Duey] agreed with the need for killing at some point, the embryonic army they were forming was likely to collapse under the heat an assassination would focus on them, he said. Parmenter agreed, saying the proposed Aryan Academy training camp should be in operation at least a year before such a great leap was taken."⁴³³ Both Duey and Parmenter were high ranking members of the Order.

3. Low Competency: List all of the arguments for the leader's perception of low group competency.

None.

4. Having now investigated the evidence for the leadership having the perception of a high, medium and low level of group competency, identify which one of these leadership perceptions is most likely and explain why.

High: RDYC leadership's perception of level of competency is high. Their broad objective of conducting an asymmetric war with the New World Order demonstrates this perception, as does the belief their members are highly trained and capable.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor might likely change in the next five (5) years.

As it is mentioned in the report by DHS/I&A, returning veterans are a factor in fueling right-wing extremism. "Returning veterans possess combat skills and experience that are attractive to right-wing extremists. DHS/I&A is concerned that right-wing extremists will attempt to recruit and radicalize returning veterans in order to boost their violent capabilities."⁴³⁴

I. Leadership's Perception of Existential Threat(s) to the Group

1. High Existential Threat: List all of the arguments for the leadership having the perception that the group faces a high existential threat.

⁴³¹ Freilich, *American Militias*, p. 76.

⁴³² US Department of Justice, Federal Bureau of Investigation, Kansas City, Missouri, File: 100-HQ-487200, (July 2, 1982), p. 2.

⁴³³ Flynn, *The Silent Brotherhood*, p. 193.

⁴³⁴ US Department of Homeland Security, office of Intelligence and Analysis Assessment, "Rightwing Extremism: Current Economic and Political, Climate Fueling Resurgence in Radicalization and Recruitment," (April 7, 2009), p. 3.

a. Hutaree Militia

The level of existential threat was high in the Hutaree group. However, much of this concern was generated by religious convictions involving conspiracies and other non-science based conclusions. The group defines itself as a “Christian Militia/ Survivalist Organization,” and as it is explained in their website: “First we are Christian, we have Jesus Christ as our foundation, we see the end of the age coming quickly, and with it some very rough times ahead ... Second we are Militia, we believe in defending our right to the God given rights guaranteed us in our Constitution. We train in military tactics so we can fight to defend this Republic called America. We also train to defend not just a Nation, for that is an ego thing, but for our Faith and our Families, and our Right to be free from All forms of Tyranny. Third we are Survivalists, we prepare for the dark days ahead of us, and in doing so we must be ready to survive anything that is ahead of us.”⁴³⁵

b. The Order

In one aspect all members of the militia movement are aware that their operations are illegal and police and the FBI seek them out. Thus, one can argue that the leaderships’ perceptions of existential threats are high. The fact that members of the Order, during the commission of the Brinks armored truck heist, applied Krazy Glue to their fingertips to remove the possibility of accidentally leaving finger prints behind, demonstrates that they were aware of possible threats and had some counter measures.⁴³⁶ Another example with the Order occurred when they would purchase a vehicle. They would go to the bank, exchange their currency for the bank’s currency. They would then hand that currency to the seller of the vehicle in the same envelope they received from the bank, but before that they would write a phone number down on it so they could ask for the envelope back after the seller removed the currency. This would ensure their fingerprints were not on the currency used to purchase the vehicle.⁴³⁷

c. M.O.M.

The Militia of Montana leadership’s perception of existential threat was high. For instance, they felt a constant threat from the “New World Order.” They believed in conspiracy theories, including a “...global conspiracy orchestrated by financial and corporate elites. Militia members believed that these unseen powers were using the United Nations to overturn the Constitution and invoke martial law as they absorbed the United States into an international totalitarian state.”⁴³⁸ Believing in the conspiracy theories goes so far for the Militia of Montana that they believe “that the federal government is currently manipulating weather patterns and manufacturing natural catastrophes all across the globe to create worldwide havoc.”⁴³⁹

The Militia of Montana leadership’s perception of existential threat was high, which led the group to advise other militia groups to “operate below ground.”⁴⁴⁰ “These militias, which have increased since the Oklahoma City bombing, believed that rather than making themselves highly visible, militias should draw upon the ‘leaderless resistance’ mode. This model argues that militias should organize in autonomous secretive underground cells thereby making it harder for the government to infiltrate them.”⁴⁴¹

John Trochmann “detailed for me the various troop and tank sightings that led him to believe that foreign troops were massing on, or in some cases within, our borders, preparing for a United Nations invasion of the US. Their ultimate intent: ‘A business takeover of America,’ he said.”⁴⁴²

“We, the Sovereign Citizens of the United States of America are the true Militia under the Constitution, and when the Citizens see (as stated in the Declaration of Independence) ‘a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute

⁴³⁵ See the Hutaree Website at: <http://hutaree.org/>

⁴³⁶ Flynn, *The Silent Brotherhood*, p. 232.

⁴³⁷ Ibid, p. 149.

⁴³⁸ “Militia of Montana.”

⁴³⁹ Freilich, *American Militias*, p. 18.

⁴⁴⁰ Ibid, p. 14.

⁴⁴¹ Ibid.

⁴⁴² Neiwert, *In God’s Country*, p. 76.

Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security.’”⁴⁴³

d. CSA

As mentioned earlier in this profile, the CSA (The covenant, The Sword, The Arm of the Lord), had a training camp. They “established a 224-acre community and a paramilitary school, which it named Endtime Overcomer Survival Training School.”⁴⁴⁴ The name is self-explanatory about the perception of existential threat.

2. *Medium Existential Threat*: List all of the arguments for the leadership having the perception that the group faces a medium existential threat.

None.

3. *Low Existential Threat*: List all of the arguments for the leadership’s perception that the group faces a low existential threat.

None.

4. Having now investigated the evidence for the leadership’s perception of a high, medium and low existential threat, identify which of these is the most likely leadership perception and explain why.

High: The RDYC’s leaders are highly cognizant of the threats of law-enforcement and believe that they are under constant threat of arrest or murder by the agents of the NWO.

5. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

6. Consider how this factor might likely change in the next five (5) years.

Expanded US military hosting of foreign military personnel could alter the conclusion in the short term.

J. Leadership’s Preference for “Failure”

1. *Fail Deadly*: List all of the arguments for the leadership preferring that, in the event of mishap, mission failure still results in the detonation of the weapon, regardless of its location or any other considerations.

a. Hutaree Militia

As mentioned earlier, the Hutaree group was planning to kill a police officer and carry out another attack in his funeral. This plan of attack, which would maximize indiscriminate casualties, including women and children, illustrates that the leadership might prefer failed deadly over fail impotent.

b. The Covert Group

Samuel Crump and his associates planned to deposit two pounds of ricin simultaneously on highways in five different cities, letting the passing cars spread it through the air.⁴⁴⁵ This kind of indiscriminate and morally absent attitude is likely evidence for a preference to fail deadly.

2. *Fail Impotent*: List all of the arguments for the leadership preferring that, in the event of mishap, mission failure results in an inert weapon; regardless of what occurs, if the mission’s objectives are not reached the weapon will not detonate.

None.

3. Having now investigated the evidence for the leadership’s preference for fail deadly and fail impotent, identify which one of these two options is the most likely leadership preference and explain why.

⁴⁴³ Maue, “What is the Militia,”

⁴⁴⁴ Juergensmeyer, *Terror In The Mind of God*, p. 34.

⁴⁴⁵ FBI Complaint, United States District Court, Northern District of Georgia, United States of America v. Samuel Crump, Case Number: 2:11-MJ-103, (November 1, 2011), p. 6. Emphasis added.

Fail Deadly: RDYC's goal of blunting the NWO's role and ejecting foreign soldiers from US soil would be advanced even if the weapon went off accidentally and/or at the wrong time and space.

4. Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

No.

5. Consider how this factor might likely change in the next five (5) years.

Any change in the RDYC's perceived constituency would likely affect its leader's preference for failure. With more supporters, RDYC would likely give greater consideration to fail safe in order to prevent any harm from coming to its supporters.

III. Conclusion

Based on any and all knowledge you have of the group (including, of course, insight from the compilation of this profile), what type of nuclear C&C do you think the group would employ and why? (I.e., is it: Pre-determined, Assertive, or Delegative.)

Delegative: Certain militia groups with strong Christian leanings may be led in a highly assertive style (for example, James Ellison and his group the Covenant, the Sword, and the Arm of the Lord). However, with the Republic's Defenders of Yahweh and the Constitution (RDYC), their religious inclinations towards a strong hierarchical structure are ameliorated by two factors—the level of perceived competency of the group and the acknowledged need to adapt to developing situations—thus their command and control system is likely to be delegative. First, the men in the group all have strong skill sets, high levels of efficacy and, in general, very good decision-making skills. RDYC's leader, Benjamin Eden is aware of these traits and sees many of these virtues in his wife and sister-in-law. With the elimination of Eden's brother Rory, and the clear loyalty of Rory's widow, the leader now has reasonably high levels of trust in the group's ability to act properly on an individual basis in a variety of demanding situations. Moreover, Eden is aware of the risks inherent in their planned nuclear attack; he understands that plans may have to change quickly. In short, Eden is realistic about the group's capabilities and the risks inherent in their upcoming nuclear attack. With a strong desire to send a message to the traitorous New World Order members of the US government (and the foreign soldiers it hosts on US military bases), he is determined that the attacks go off, even if that means entrusting others in the group with final decisions regarding the actual execution of the operations.

Profile 2: Tehrik-e-Taliban Pakistan (TTP)

Charles P. Blair
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I. Pre-Analysis

A. General Background of the Group

Since its debut in December 2007, TTP has typically been described as an “umbrella organization” representing some 40 senior Taliban leaders⁴⁴⁶ and their 27 groups.⁴⁴⁷ The same *shura* (consultation body) that nominally created the TTP reportedly also determined its top commanders.⁴⁴⁸ Baitullah Mehsud (deceased and succeeded by Hakimullah Mehsud) was announced as the central leader with Hafiz Gul Bahadar as the second commander and Faqir Mohammad as the third commander.⁴⁴⁹ However, the *shura* demoted Faqir Mohammad on March 6, 2012; because of, among other factors, his alleged peace talks with the Pakistani government without the TTP leaders’ approval.⁴⁵⁰ In an interview with *BBC*, Ehsanullah Ehsan, TTP spokesman, declared, “He will remain a part of the TTP, but will work as a common fighter.”⁴⁵¹ While no one had been shortlisted by the *shura* as the next *naib amir*, Ehsan said that the *shura* would make a decision during its next meeting. However, his successor is unknown at the time of this writing.

Despite effective US drone assassination attacks and setbacks on the battlefields of FATA and Kyber Pakhtunkhwa, as of July 2012 the TTP is still a relatively formidable fighting force.

In some cases, elements of the TTP are principally linked to the establishment of a Pashtun state, or *emirate*, in the Afghan-Pakistani tribal areas—compelling violent actions to obtain full independence from rulers in Islamabad, expel all NATO International Security Assistance Forces [ISAF] and US forces (henceforth US-led coalition) from Afghanistan, and return a Taliban government to Kabul. Other elements of the TTP fundamentally seek to revoke the rights of Shi’ite and Barelvi (i.e. Sufi) Muslims, and to blunt and roll back the Indian influence in South and Central Asia. Still others within the TTP primarily endeavor to enforce their perception of *Shari’a* in all of Pakistan and, in some cases, may arguably seek to establish a global caliphate.⁴⁵² Despite these varied aspirations, collectively the TTP can be seen as a violent, Islamized network rooted in the Deobandi movement of Sunni Islam, active in the south-central areas of Asia that

⁴⁴⁶ Mushtaq Yusufzai, “Milantants Seek End to Military Operations,” *The News* (Islamabad), December 16, 2007. Available at: http://server.kbri-islamabad.go.id/index.php?option=com_content&task=view&id=3197&Itemid=53

⁴⁴⁷ Sadia Sulaiman, “Empowering ‘Soft’ Taliban Over ‘Hard’ Taliban: Pakistan’s Counter-Terrorism Strategy,” *Terrorism Monitor* Vol. 6, Issue 15 (July 25, 2008). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=5080](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=5080)

⁴⁴⁸ Ibid. Reportedly also present at the meeting were key Taliban leaders of the five other non-Waziri FATA agencies (from south to north: Kurram, Orakzai, Khyber, Mohmand and Bajaur) as well as key Taliban representatives from Khyber Pakhtunkhwa districts (also roughly from south to north) of Dera Ismail Khan, Tank, Lakki Marwat, Bannu, Kohat, Peshawar, Malakand, Buner, Swat and Dir. Ibid.

⁴⁴⁹ See Qandeel Siddique, “The Red Mosque Operation and its Impact on the Growth of the Pakistani Taliban,” *Norwegian Defence Research Establishment* (FFI), October 2008, p. 27.

⁴⁵⁰ Bill Roggio, “Pakistani Taliban deputy Faqir Mohammad demoted,” *The Long War Journal* (March 6, 2012). Available at: http://www.longwarjournal.org/archives/2012/03/pakistani_taliban_de_1.php

⁴⁵¹ Amir Mir, “Battle for Pakistani Taliban’s militant soul,” *Asia Times*, (March 8, 2012). Available at: http://www.atimes.com/atimes/South_Asia/NC08Df01.html

⁴⁵² These various aspirations—fighting internal sectarian jihads, regional jihads, and an external jihad against the West—are examined in depth in, “Pakistan: The Militant Jihadi Challenge,” *Asia Report N° 164*, International Crisis Group (March 13, 2009), *passim*. It should be noted that a Taliban “takeover” of Pakistani central authority was reportedly first pursued in 1995. In that event a group of military officers led by Qari Saifullah Akhtar, a key TTP militant whose exploits are recorded throughout this report, made a serious but unsuccessful bid to destroy the top echelons of the Pakistani military, overthrow the government of Benazir Bhutto, and pave the way for a Taliban takeover similar to Afghanistan.” See Arif Jamal, “The Growth of Deobandi Jihad in Afghanistan,” *Terrorism Monitor* Vol. 8, Issue 2 (January 14, 2010). Available at:

[http://www.jamestown.org/programs/gta/single/?tx_ttnews\[tt_news\]=35911&cHash=e851fcd028](http://www.jamestown.org/programs/gta/single/?tx_ttnews[tt_news]=35911&cHash=e851fcd028)

historically have been beyond the yoke of centralized powers: what is today Pakistan's Khyber Pakhtunkhwa Province (formerly known as the North-West Frontier Province [NWFP]), Federally Administered Tribal Areas (FATA), northern Balochistan, northern areas of the Punjab province, and sections of southern and eastern Afghanistan.⁴⁵³

Between 2011 and 2012, TTP has regrouped from setbacks experienced in 2010 and reemerged as a leaner and more clandestine—yet more factionalized—terrorist network.⁴⁵⁴ Despite repeated claims that Hakimullah Mehsud was killed in 2010, he was alive and remained the *de jure* leader of the TTP⁴⁵⁵ until January 2012, when a series of reports emerged claiming that he had been killed by a drone strike in North Waziristan.⁴⁵⁶ His death has not yet been confirmed, and he still remains on the FBI's most wanted terrorist list.⁴⁵⁷ Reports now indicate that the TTP has regrouped in South and North Waziristan (with their headquarters in the former) as well as the other FATA agencies and southern Khyber Pakhtunkhwa districts.

Having played a significant role in the transport and supplying of *mujahidin* in the *Soviet-Afghan War* (1979 – 1989), the Bajaur agency's physical terrain and sympathetic tribes were similarly central in channeling thousands of militants fleeing Afghanistan in 2001-2002. Bajaur's unique status, with regard to its history with the Taliban, is further underscored by its links to TNSM—most of Bajaur's TTP leaders are former TNSM members—and its reported status as a large Al Qaida sanctuary.⁴⁵⁸ In addition, the TTP's efforts to

⁴⁵³ Many of the groups discussed in this study have been proscribed by the Pakistani government only to appear under a different name. Unless otherwise noted, this study employs the group names that are likely to be most familiar to the reader. For accounts of FATA and Khyber Pakhtunkhwa's (i.e., the NWFP's) pre-TTP history see Shaheen Sar Ali, *Indigenous Peoples and Ethnic Minorities of Pakistan: Constitutional and Legal Perspectives*, Nias Monographs, 84 (New York: Rutledge, 2001), and Stephen Rittenberg, *Ethnicity, Nationalism, and the Pakhtuns: The Independence Movement in India's North-West Frontier Province* (Durham, North Carolina: Carolina Academic Press, 1998).

⁴⁵⁴ See section on "Perceived Trustworthiness"

⁴⁵⁵ For the most recent evidence that Hakimullah Mehsud was alive and in charge of the TTP see: "Hakimullah still safe in North Waziristan," *Dawn*, January 20, 2012. Available at: <http://dawn.com/2012/01/20/hakimullah-still-safe-in-north-waziristan-sources/>. It has been also noted that "Mehsud's leadership has been challenged by other figures, too, including his rival Wali-ur-Rehman." Declan Walsh, "Pakistan Taliban Chief Hakimullah Mehsud Still Alive, Says Spy Agency," *The Guardian*, April 28, 2010. Available at: <http://www.guardian.co.uk/world/2010/apr/28/hakimullah-mehsud-survives-cia-drone>. As of August 2011, there is a general consensus that Hakimullah is alive and running the TTP. A video released in March 2011 shows him directing the execution of a former ISI official. See, Bill Roggio, "Video: Pakistani Taliban Execute Colonel Imam," *The Long War Journal*, February 20, 2011. Available at: http://www.longwarjournal.org/archives/2011/02/video_pakistani_tali.php

⁴⁵⁶ Bill Roggio, "Hakeemullah Mehsud rumored killed in recent drone strike," *The Long War Journal* (January 15, 2012). Available at: http://www.longwarjournal.org/archives/2012/01/hameemullah_mehsud_r.php

⁴⁵⁷ "Most Wanted Terrorists: HAKIMULLAH MEHSUD," FBI, Available at: http://www.fbi.gov/wanted/wanted_terrorists/hakimullah-mehsud/view

⁴⁵⁸ Ibid, 3. As noted earlier, Bajaur was the scene of the January 2006 US drone attack targeting Ayman al-Zawahiri. The area, like the Waziristan agencies, has a history of hosting Afghan Taliban and al-Qa'ida fighters as well as possessing thousands of radicalized tribesmen. See, for example, Bill Roggio, "Pushing Forward with the Bajaur Accord," *The Long War Journal* (November 2, 2006). Available at: http://www.longwarjournal.org/archives/2006/11/pushing_forward_with.php

Summing up Bajaur's unique role in the evolution—and, implicitly, the future—of the TTP, Claudio Franco, an investigator who has spent years in the Malakand region, has written:

Where the evolution of the Taliban phenomenon is concerned, the peculiarity of Bajaur is rooted in the role 'assigned' by the militants to the agency in the early post- 9/11 years. As mentioned, if Waziristan emerged immediately as the primary frontline of the low intensity confrontation between Taliban militants and the federal government, Bajaur was initially intended to be a logistical base and provide a safer hiding place for fleeing foreign militants, far away from the Army's spotlights and with the added benefit of a well-trodden path leading directly to one of the most inaccessible areas of Afghanistan, the Kunar-Nuristan triangle. As a consequence, local Taliban sympathizers and militants found themselves better equipped than others to operate training camps and offer sanctuary to high profile al Qaida affiliated leaders. For years, the northern FATA have played a critical role in relation to the presence of foreign terrorist operatives on Pakistani soil."

establish broad areas under parallel governance, already noted as having been largely implemented in several of the FATA agencies, was arguably most successful in the Bajaur agency.⁴⁵⁹ Despite these conditions, until 2008 Bajaur was not used as a front line by the TTP but rather as a conduit, via the Nawa Pass, for launching anti-US coalition operations into the Kunar Province of Afghanistan. Because of its relative calm⁴⁶⁰ and remoteness, Bajaur was reportedly also used as a base for planning transnational terrorist attacks—for example, the successful London bombings in July 2005 and the plots to launch suicide attacks in the Barcelona metro, intercepted by Spanish and French authorities in December 2007.⁴⁶¹ In short, Bajaur is the hub of TTP, Al Qaida and Afghan Taliban activity in northwestern Pakistan and northeastern Afghanistan.⁴⁶²

Details of the TTP's organizational structure are sparse. This is largely the result of its status as an umbrella organization for dozens of independent groups and factions. Because the TTP conceives of itself as part of the larger Taliban struggle, and is thus active in both Afghanistan and Pakistan, all its leaders are believed to have sworn an oath of allegiance to Mullah Omar and bin Laden.⁴⁶³ However, as of early July 2012, no reports exist of TTP members offering oaths to Al Qaida's post-bin Laden leader—*Ayman al-Zawahiri*. When operating with the Afghan Taliban against US-led coalition forces in Afghanistan, the TTP reportedly operates within the command structure of Mullah Omar⁴⁶⁴ (himself now rumored to be dead⁴⁶⁵). However, operations within Pakistan are commanded by TTP leaders—a group whose constituent elements are not in agreement on many key issues.⁴⁶⁶

Claudio Franco, "The Tehrik-e-Taliban Pakistan: The Bajaur Case," The NEFA Foundation (July 2009), p. 5 Available at: http://www.humansecuritygateway.com/documents/NEFA_TehrikeTalibanPakistan_BajaurCase.pdf

Al-Qaida's Abu Farraj al-Libbi reportedly told authorities, after his arrest in May 2005, that he "had lived in Bajaur for some time." Hassan Abbas, "Profiles of Pakistan's Seven Tribal Agencies," *Terrorism Monitor*, Vol. 4, Issue 20 (October 2, 2006). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=891](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=891) For more on al-Libbi

⁴⁵⁹ Abbas, "Profiles of Pakistan's Seven Tribal Agencies," pp. 7-8.

⁴⁶⁰ Recall, however, that Bajaur was the site of several deadly US air-strikes, one almost succeeding in killing Ayman al-Zawahiri.

⁴⁶¹ For information on the Barcelona plot, see Douglas Farah, "Analysis of the Spanish Suicide Bombers Case," The NEFA Foundation (February 22, 2008). Available at:

<http://www1.nefafoundation.org/miscellaneous/nefaspainmartyrs08.pdf>

⁴⁶² Bill Roggio, Taliban's Mastermind of Suicide Attacks is Alive," *The Long War Journal* (February 15, 2010). Available at: http://www.longwarjournal.org/archives/2010/02/talibans_mastermind.php For more on Bajaur's central importance in the Afghan war theatre, see Mukhtan A Khan, "A Profile of Militant Groups in Bajaur Tribal Agency," *Terrorism Monitor*, Vol. 7, Issue 6 (March 19, 2009). Available at:

[http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=34729&tx_ttnews\[backPid\]=7&cHash=a3e8ad5b5f](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=34729&tx_ttnews[backPid]=7&cHash=a3e8ad5b5f)

⁴⁶³ See, for example, A. Acharya et al, "Making Money in the Mayhem,"

Studies in Conflict and Terrorism, Vol. 32, (2009) pp. 96 and Bruce Riedel, "Obama's Afghan Gamble," Yale Global Online, December 3, 2009. Available at: <http://yaleglobal.yale.edu/content/obama%E2%80%99s-afghan-gamble> See also Carlotta Gall, "Pakistan and Afghan Taliban Close Ranks," *The New York Times*, March 26, 2009. Such an oath is in harmony with the Wahhabist doctrine that requires Muslim males to "present a bayah, or oath of allegiance, to a Muslim ruler during his lifetime to ensure his redemption after death. The ruler is conversely owed unquestionable allegiance from his people so long as he leads the community according to the laws of God, The whole purpose of the Muslim community is to become the living embodiment of God's laws, and it is the responsibility of the legitimate ruler to ensure that the people know God's laws and live in conformity with them." M.J. Gohari, *The Taliban: Ascent to Power* (Karachi: Oxford University Press, 2000), p. 39.

⁴⁶⁴ A. Acharya et al, "Making Money in the Mayhem," p. 96-97. Elements of the TTP from South and North Waziristan provide the Afghan Taliban with their largest source of material and human resources.

⁴⁶⁵ See, for example, "Mullah Omar 'Disappears' from Pak Hideout: Afghan Official," *Dawn*, May, 23, 2011. Available at: <http://www.dawn.com/2011/05/23/mullah-omar-disappears-from-pak-hideout-afghan-official.html>

⁴⁶⁶ Ibid.

Never a homogenous or unified movement, the TTP has always been marked by factionalization.⁴⁶⁷ Recently, however, it is likely that factionalization has grown as the various rival components of the TTP compete for resources and as the issue of whether to target the Pakistani state, and how, becomes more acute. Typical of most violent extremist groups that go through such a process, emerging factions of the TTP are increasingly “extreme.”⁴⁶⁸ While a violent non-state actor’s operational objectives (e.g., targets) are usually largely shaped by their ideology, factionalization can drive them to more brutal and destructive acts because of the perceived “need to produce attack results that boost group morale, serve to differentiate the group from other terrorist groups, or demonstrate leadership will and commitment.”⁴⁶⁹ A 2006 Lawrence Livermore National Laboratory report exploring terrorist targeting hypothesizes that, “in groups where factionalization occurs or is imminent, a ‘challenger’ faction may push for greater scale or more extreme desired effects than otherwise as part of a power play. Also, a ‘status quo’ faction may feel the need to increase the scale or effects of an attack in order to bolster their position within the group and undermine challengers.”⁴⁷⁰ This may partially explain why elements of the TTP have increasingly targeted Sufi-related (i.e., Barelvi) Muslims.

In addition to an increase in attacks against Sufi-oriented targets, the TTP’s factionalization has also given rise to attacks against fellow Deobandi Muslims. While a degree of rancor always percolated within various TTP factions, twin suicide attacks against Maulana Fazlur Rehman (the Amir of Jamiat Ulema-e-Islam-Fazl - JUI-F) indicate that the TTP is now at war with its own compatriots. Similarly, TTP factions have increasingly targeted the Islamist political party Jamaat-e-Islami, legendary for its founder, Syed Abul A’ala Maududi, and support of the Afghan Taliban.⁴⁷¹

The growing extremism precipitated by the TTP’s ongoing factionalizing is exacerbated by the generational shift toward younger leaders and fighters in the TTP. Writing about the TTP’s execution of Colonel Imam, a retired ISI operative, Pakistani journalist Rahimullah Yusufzai notes that, “In the previous decade, Colonel Imam would have been welcomed and honored by Islamist militants in the border region. Today, however, TTP militants considered him an enemy, and saw his status merely as a tool to bargain for a ransom and the release of imprisoned TTP fighters.”⁴⁷² Hakimullah Mehsud reportedly took custody of Colonel Imam from members of the Punjabi Taliban after internecine violence broke out in the latter group. Significantly, numerous Taliban religious leaders and Sirajuddin Haqqani himself appealed for the release of Colonel Imam.⁴⁷³ Such appeals, however, did not alter Hakimullah’s belief that Colonel Imam was a US spy; the latter’s execution was videotaped under Hakimullah’s supervision in late January 2011.⁴⁷⁴ Yusufzai notes that,

“The execution may have placed a wedge between the TTP and other Islamist militants, particularly the Afghan Taliban and the Haqqani network. Jihadist leaders who used to operate with Colonel

⁴⁶⁷ Factionalization can be defined as, “the extent to which competing centrifugal and centripetal pressures affect the stability of, and the exercise of authority within, the organization. Extremist groups, unlike established bureaucratic organizations, tend to undergo a kaleidoscopic process of fission and fusion that results in considerable organizational instability, frequent schisms, and the periodic establishment of entirely new groups by breakaway factions.” Gary Ackerman, et al, “Assessing Terrorist Motivations for Attacking Critical Infrastructure,” Lawrence Livermore National Laboratory, UCRL-TR-227068, (December 2006), p. 20.

⁴⁶⁸ For an overview of this trend of greater extremism emerging from factionalization see, for example, Ethan Bueno de Mesquita, “Terrorist Factions,” *Quarterly Journal of Political Science*, Vol. 3 (2008), pp. 399-418.

⁴⁶⁹ Ackerman, et al, “Assessing Terrorist Motivations for Attacking Critical Infrastructure,” p. x.

⁴⁷⁰ Ibid, p. 155.

⁴⁷¹ Arif Jamal, “Pakistani Taliban Widen Jihad with Strikes on Fellow Muslims,” *Terrorism Monitor*, Vol. 8, Issue 28 (July 16, 2010). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=36620](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36620)

⁴⁷² Rahimullah Yusufzai, “The Implications of Colonel Imam’s Murder in Pakistan,” *CTC Sentinel*, Vol. 4, Issue 4 (April 2011), p. 18.

⁴⁷³ Ibid., p. 18-20.

⁴⁷⁴ Zahir Shah, “Hakimullah in TTP Video of Colonel Imam’s Killing,” *Dawn*, February 19, 2011. Available at: <http://www.dawn.com/2011/02/19/ttp-issues-video-of-colonel-imams-killing.html>

Imam during the anti-Soviet jihad were clearly unhappy with the TTP and Hakimullah Mehsud, privately criticizing him for executing the former ISI operative. In fact, some significant doubts have arisen about Hakimullah's agenda after the incident. Although the Afghan Taliban and Haqqani network have refrained from publicly condemning Hakimullah for killing the former operative, they are unlikely to trust him in the future."⁴⁷⁵

In sum, the TTP appears poised for increasingly violent internecine feuds that will only exacerbate Pakistan's civil war. Commenting on the state of the TTP in mid-2010, Arif Jamal, an author and visiting fellow at New York University, warned that:

"Pakistan seems to be entering a period similar to that which Afghanistan went through between the fall of Dr. Najibullah and the advent of the Taliban in the 1990s, when different factions of the mujahideen fought to eliminate their rivals. As the Pakistani Taliban spread their jihad to rival Islamist groups, the possibility of other Islamist militias being drawn into a civil war between extremist groups is looking more and more probable. If this happens, it will be bloodier than the mujahideen battles in 1990s Afghanistan, with an unimaginable international impact."⁴⁷⁶

This aspect of Pakistan's growingly dystopic future should not, however, obscure the fact that all of the TTP is still committed to evicting US-led coalition forces in Afghanistan. Moreover, most elements of the TTP are similarly aligned in their opposition to the Pakistani government, specifically with regard to blunting its actions in the tribal areas.⁴⁷⁷

B. Identification and Brief Exploration of the Group's Key Decision Maker(s)

As an umbrella organization covering dozens of discrete groups, the TTP's most important elements are currently led by six decision makers. However, to better understand the group, two additional leaders, one of whom was killed by a US drone strike and the other who was demoted in an internal power struggle, are described.

1. Hakimullah Mehsud

Hakimullah is the current leader (Amir) of the TTP. Born in 1981 into South Waziristan's dominant Mehsud tribe, Hakimullah ("one who has knowledge"⁴⁷⁸) differs from most other Pakistani neo-Taliban movement (PNT)⁴⁷⁹ leaders in that his post-madrassa jihadi endeavors were conducted in Pakistan's tribal areas, not with the Taliban in Afghanistan.⁴⁸⁰ At age 24, he was named the spokesman for Baitullah Mehsud's growing militia. Within four years, Hakimullah had risen to commander rank within the TTP in a portfolio that included three of FATA's agencies (Orakzai, Khyber, and Kurram).⁴⁸¹ In August 2009, after a violent dispute over who would succeed Baitullah Mehsud, he emerged as the TTP's new leader.⁴⁸² Similar to the challenges faced by his predecessor,⁴⁸³ Hakimullah's tenure as the head of the TTP has been marked by his struggle with

⁴⁷⁵ Yusufzai, "The Implications of Colonel Imam's Murder in Pakistan," 20.

⁴⁷⁶ Arif Jamal, "Pakistani Taliban Widen Jihad with Strikes on Fellow Muslims," *Terrorism Monitor* Vol. 8 Issue: 28.

Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=36620](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36620)

⁴⁷⁷ See, for example, "Militant Intentions: Taliban Plan Tit-for-Tat in N Waziristan Attacked," *The Express Tribune*, April 18, 2011. Available at: <http://tribune.com.pk/story/151687/militant-intentions-taliban-plan-tit-for-tat-if-n-waziristan-attacked/>

⁴⁷⁸ "Hakiimullah Cultivates Ruthless Reputation," *Dawn*, January 14, 2010. Available at: <http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/news/pakistan/03-Hakiimullah-mehsud-cultivates-ruthless-reputation-ss-07>

⁴⁷⁹ The PNT is a term for the umbrella group of Taliban-like organizations in Pakistan, of which the TTP is arguably the main component.

⁴⁸⁰ Alex Rodriguez and Zulfiqar Ali, "Pakistani Taliban Names New Leader," *The Los Angeles Times*, August 23, 2009. An obvious and significant trend is that the younger emerging generation of the PNT's leadership was born too late to have fought in Afghanistan before the Taliban was ejected in 2001/2002.

⁴⁸¹ "Hakiimullah Cultivates Ruthless Reputation."

⁴⁸² "The Pakistani Taliban in Disarray," *The Economist*, August 27, 2009.

⁴⁸³ In order to maintain his power, Baitullah reportedly engaged in targeted killings of Pakistani Taliban rivals, demonstrating no compunction about targeting fellow Mehsud tribesmen. The death of Abdullah Mehsud was believed to have been the result of his whereabouts being made known to the Pakistani military by Baitullah. (Abdullah was the

other leading PNT figures to maintain leadership.⁴⁸⁴ His command style is considered unusually tolerant of risk, and he reportedly employs a “showy cruelty.” Although he has allegedly appeared on video as recently as March 2011,⁴⁸⁵ Hakimullah’s last confirmed video appearance was alongside a Jordanian physician, Humam Khalil Abu Mulal al-Balawi. The latter subsequently blew himself up at the CIA’s Forward Operating Base Chapman, located in Afghanistan’s southeastern province of Khost. The attack on December 30, 2009, killed seven CIA agents, Abu Mulal’s Jordanian intelligence contact, and injured six others.⁴⁸⁶ Both Hakimullah and Abu Mulal stated that the forthcoming attack would be in reprisal for the August 2009 CIA-operated drone attacks that killed Baitullah Mehsud.

As previously mentioned, several sources indicate that Hakimullah barely escaped drone attacks in mid-January 2010, in February 2010 and in January 2012. However, TTP spokesman Ehsanullah Ehsan strongly denied the latest reports on January 15, 2012 and claimed that Hakimullah was not even in the area. He added, “There is no truth in the reports about Hakimullah’s death, although he is a human being and can die any time. He is a mujahideen and we wish him martyrdom. Jihad is not linked with Hakimullah alone and wouldn’t stop even if he is killed. We will continue jihad whether Hakimullah Mehsud is alive or dead. There are so many lions in this jungle and one lion would replace another to continue this noble mission.”⁴⁸⁷

2. Hafiz Gul Bahadar

“Perhaps no one has greater stature or importance in the [TTP’s] leadership,” reported the Jamestown Foundation in April 2009, “than Hafiz Gul Bahadar, who is the supreme commander of the North Waziristan Taliban.”⁴⁸⁸ Bahadar, who is in his late-40s, is a member of North Waziristan’s Uthmanzai Wazir tribe. After leaving his madrassa-based studies in the 1980s, he fought in the Soviet–Afghan War before returning to North Waziristan.⁴⁸⁹ His rise as a local leader began in 2005 when he commanded forces in battle against the Pakistani army that entered North Waziristan.⁴⁹⁰ Bahadar was a negotiator at the September 2006 North Waziristan Agreement, which temporarily ended that phase of the war. As the commander of all Taliban forces in North Waziristan, he joined in the creation of the TTP in 2007 and was appointed “first deputy head”—the second-in-command behind then-leader Baitullah Mehsud.⁴⁹¹ Bahadar subsequently demonstrated that he did not consider himself subordinate to Baitullah. Their rift, symptomatic of the TTP’s larger internecine conflict, resulted in Bahadar’s temporary abandonment of the TTP and the formation of a new alliance with other Taliban leaders.⁴⁹² Although he ultimately rejoined with Baitullah, in the interim,

head of the eponymous organization: the Abdullah Mehsud Group. Abdullah Mehsud’s successor, his younger brother, Masadur Rahman, also died in an incident believed to be linked to Baitullah. Most recently, Masadur Rahman’s successor, Qari Zainuddin Mehsud, was similarly killed by assassins dispatched by Baitullah. See Mukhtar A. Khan, “A Profile of the Late Qari Zainuddin Mehsud –Waziristan Militant and Opponent of Baitullah Mehsud,” *Terrorism Monitor* Vol. VII, Issue 19 (July 2, 2009), p. 5-6. For more on Ikhlas Khan Mehsud see Bill Roggio, “Anti-Baitullah Taliban Groups Merge, Appoint New Leader,” *The Long War Journal* (July 22, 2009). Available at: http://www.longwarjournal.org/archives/2009/07/antibaitullah_taliba.php

⁴⁸⁴ Farhan Bokhari, “Taliban Leader’s Death Starts Power Struggle,” *Financial Times*, August 8, 2009.

⁴⁸⁵ See Roggio, “Video: Pakistani Taliban Execute Colonel Imam.”

⁴⁸⁶ Richard A. Oppel Jr., Mark Mazzetti and Souad Mekhennet, “Attacker in Afghanistan Was a Double Agent,” *The New York Times*, January 4, 2010.

⁴⁸⁷ Amir Mir, “Hakimullah Mehsud Evades US Drones, Again,” *Asia Times*, (January 27, 2012). Available at:

http://www.atimes.com/atimes/South_Asia/NA27Df01.html

⁴⁸⁸ Sadia Sulaiman and Syed Adnan Ali Shah Bukhari, “Hafiz Gul Bahadar: A Profile of the Leader of the North Waziristan Taliban,” *Terrorism Monitor* Vol. VII, Issue 9 (April 10, 2009), pp. 4-6.

⁴⁸⁹ “Hafiz Gul Bahadar: A Profile of the Leader of the North Waziristan Taliban,” pp. 4-6.

⁴⁹⁰ Ibid. As was detailed earlier in this report, the military’s engagements with the nascent PNT from October 2003 until February 2005 had been limited to South Waziristan

⁴⁹¹ Ibid.

⁴⁹² Bahadur correctly perceived that, after being made head of the TTP, Baitullah Mehsud was attempting to expand his power and suppress rivals. Bahadur had no intention of acquiescing and, together with Mullah Nariz, he formed the short-lived Muqami Tehrike-Taliban (Local Taliban Movement). Ibid, p. 6. For more on the Muqami Tehrike-Taliban (a.k.a. the ‘Waziri alliance’ of Bahadur-Nazir) see Sadia Sulaiman, “Empowering ‘Soft’ Taliban Over ‘Hard’ Taliban:

Bahadar struck independent deals with both Mullah Omar and the Pakistani government.⁴⁹³ Bahadar allegedly provides shelter to “top Al Qaida leaders as well as to operatives from numerous Pakistani and Central Asian terror groups.”⁴⁹⁴ Relations between Bahadar and the Haqqani network are reportedly close.⁴⁹⁵

Despite deep involvement against US-led coalition forces in Afghanistan, Bahadar is classified as a “militant” by Pakistani officials as opposed to a “terrorist” classification. Perceived as “good” Taliban—those who do not carry out attacks inside Pakistan—the Pakistani military has repeatedly suspended any type of serious military action in North Waziristan against him and his forces. Indeed, as noted earlier, there is evidence that the Pakistani military is purposefully allowing TNSM (Movement for the Enforcement of Islamic Laws), a group closely related to the TTP, to reassert itself in the Malakand region as a means of diverting its “response” to that region, as opposed to acquiescing to US demands for action in North Waziristan.⁴⁹⁶

Adding to the complexity of Bahadar’s relations to Pakistan’s military are the US drone attacks. Since the CIA’s drone campaign began in 2004, 73 of the 241 total attacks—almost a third—have been against targets specifically related to Bahadar.⁴⁹⁷ Always under the perception that US military actions are conducted in close consultation with the Pakistani military, each attack moves Bahadar further away from cooperating with Pakistani officials. For example, in March 2011, a CIA drone strike killed Sherabat Khan, one of Bahadar’s top commanders, along with 43 other people.⁴⁹⁸ Described as Bahadar’s “right-hand man,” the killing of Khan precipitated an unusually strong reaction from Bahadar.⁴⁹⁹ The latter threatened to withdraw from any peace agreements he had with the Pakistani government and likely hinted at a resumption of at least tacit approval of re-targeting Pakistani facilities and leaders. Hoping to placate Bahadar and to pressure the US to abandon his targeting, Pakistani leaders responded by strongly rebuking the US. According to Chief of Army Staff General Ashfaq Kayani, the attack was “carelessly and callously targeted with complete disregard to human life.”⁵⁰⁰ Despite claims by the US that “all the dead were militants or sympathizers,” Pakistan added to its démarche by withdrawing from upcoming US-Afghan talks.⁵⁰¹ The episode exemplifies how US targeting in its Afghanistan campaign of “good Taliban”—rightly perceived of as

Pakistan’s Counter-Terrorism Strategy,” *Terrorism Monitor* Vol. 6, Issue 15 (July 25, 2008). Available at:

[http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=5080](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=5080)

⁴⁹³ Ibid. Bahadar’s cooperation (and “signed peace agreement”) with the Pakistani government has not resulted in US targeting changes. As late as March 11, 2010, Bahadar was targeted by US drones. See Pazir Gul, “Drone Attacks Kill 14 in North Waziristan,” *Dawn*, March 11, 2010. Available at <http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/news/pakistan/provinces/21-us-missile-strike-kills-four-in-pakistan-sk-53> For Bahadar’s “signed peace agreement” with the Pakistani government, see Bill Roggio, “US Airstrikes Kill 15 in North Waziristan,” *The Long War Journal* (March 10, 2010). Available at: http://www.longwarjournal.org/archives/2010/03/us_airstrike_kills_1.php

⁴⁹⁴ For example, Bill Roggio, “US Predators Strike Again in North Waziristan,” *The Long War Journal*, May 13, 2011.

Available at: http://www.longwarjournal.org/archives/2011/05/us_predators_strike_24.php

⁴⁹⁵ See, for example, Jeffrey Dressler “The Haqqani Network: From Pakistan to Afghanistan,” *Institute for the Study of War* (2010), p. 4. Available at: http://www.understandingwar.org/files/Haqqani_Network.pdf

⁴⁹⁶ Perennial reports assert that Bahadar is dead. See, for example, “Drone Strikes Kill 21 in Pakistan,” *The New York Times*, March 10, 2010 and Bill Roggio, “Top Waziristan Taliban Leader Bahadar Rumored Killed in US Strike,” *The Long War Journal* (March 11, 2010). Available at:

http://www.longwarjournal.org/archives/2010/03/top_north_waziristan.php

⁴⁹⁷ Data current through May 16, 2011. See, Bill Roggio and Alexander Mayer, “Charting the Data for US Airstrikes in Pakistan, 2004-2011,” *The Long War Journal*. Available at: <http://www.longwarjournal.org/pakistan-strikes.php> Roggio and Mayer demonstrate that 71 percent of all drone attacks have been in North Waziristan, Ibid.

⁴⁹⁸ See “C.I.A. Drones Kill Civilians in Pakistan,” *The New York Times*, March 17, 2011. Available at:

http://www.nytimes.com/2011/03/18/world/asia/18pakistan.html?_r=1

⁴⁹⁹ Zia Khan, “Waziristan Drone Attack: Taliban Faction Threatens Scrapping Peace Deal,” *The Express Tribune*, March 21, 2011. Available at: <http://tribune.com.pk/story/135711/waziristan-drone-attack-taliban-faction-threatens-scrapping-peace-deal/>

⁵⁰⁰ “Gen Kayani Condemns ‘Unjustifiable’ Drone Attack,” *The Express Tribune*, March 18, 2011. Available at:

<http://www.webcitation.org/5xGFsnCAV>

⁵⁰¹ Munir Ahmed, “After Strike, Pakistan Cancels US-Afghan Talks,” *Associated Press*, March 18, 2011.

legitimate due to their strong support to the Afghan Taliban—compels the Pakistani government to employ obfuscation and express outrage as it seeks to secure a force that it simultaneously perceives as a means toward their goals in Afghanistan and a potential threat to their internal security.

3. Maulana Faqir Mohammed

The December 2007 public unveiling of the TTP was accompanied by the naming of Maulana Faqir Mohammed as “Deputy Chief” (or “Deputy Amir”⁵⁰²), the third-in-command of the organization, behind Hafiz Gul Bahadar and then-leader Baitullah Mehsud.⁵⁰³ He was already well-known because of his military leadership during the Battle of Bajaur and his close friendship with Ayman al-Zawahiri. However, as mentioned earlier, he was demoted in 2012 because of his alleged peace talks with the Pakistani government. His successor is still unknown.

4. Maulavi Nazir

Maulavi Nazir is emblematic of the elements that have been reluctant to expand their struggle to Pakistani targets within the PNT generally and the TTP specifically, instead prioritizing the Afghan jihad. Nazir is considered a “good Taliban,” by Pakistani officials. Born in 1975 into South Waziristan’s Kakakhel tribe, which is a sub-clan of the Ahmedzai Wazir tribe, Nazir followed the similar route of a madrasa education followed by a journey to Afghanistan (then barely a teenager) to join in the anti-Soviet jihad.⁵⁰⁴ Staying in post-Soviet Afghanistan and eventually joining the Taliban, Nazir’s experience was relatively unique in that he established strong relations with Gulbuddin Hekmatyar’s Hezb-e-Islami, Pakistan’s ISI and the JUI-F.⁵⁰⁵ He returned to Pakistan’s South Waziristan in November 2001. Nazir positioned himself to receive significant amounts of money that Al Qaida was pouring into the Waziristan agencies.⁵⁰⁶ His stature within the PNT was firmly established by his enforcement of a rigged application of Shāri’a in areas of South Waziristan. Complicating matters was Nazir’s initial acquiescence to Mullah Omar’s demand that the PNT focus its military efforts solely on targets in the Afghan theater. Adherence to Mullah Omar’s strategic targeting preferences allowed for close ties between Nazir and the Pakistani government, specifically the ISI, an organization he had come to know well during his time in Afghanistan. Linked to this was Nazir’s violent opposition to the presence of some foreign jihadists in South Waziristan, specifically the members of the IMU and the Islamic Jihad Union (IJU).⁵⁰⁷ Consequently, Pakistani authorities saw Nazir as a “new type” of PNT leader, one that could be drawn away from Al Qaida and those PNT elements that were violently targeting the Pakistani state. Through overt support, the Pakistani government hoped to funnel Nazir’s martial operations into Afghanistan;⁵⁰⁸ his reportedly strong links to the Haqqani network are, therefore, natural.⁵⁰⁹ Not surprisingly, Nazir’s actions brought him and his group into violent conflict with Baitullah Mehsud among others. In August 2009, Nazir was reportedly killed in a power struggle that followed Baitullah Mehsud’s death. However, his death has not been confirmed.⁵¹⁰

⁵⁰² Claudio Franco, “The Tehrik-e-Taliban Pakistan: The Bajaur Case, Part I,” The NEFA Foundation (July 2009), p. 5. Available at: http://www.nefafoundation.org/miscellaneous/FeaturedDocs/nefa_ttp0709part1.pdf

⁵⁰³ “Rift Among Bajaur Taliban Widens,” *Dawn*, January 29, 2010. Available at: <http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/the-newspaper/front-page/12-rift-among-bajaur-taliban-widens-910--bi-06>

⁵⁰⁴ Recall that, among others, Nek Mohammad and Haji Omar were also from the Ahmedzai sub-tribe of Wazir tribe.

⁵⁰⁵ Specifically, he is a member of the Ahmedzai Waziris sub-clan of the Kakakhel tribe. See Hassan Abbas, “South Waziristan’s Maulvi Nazir: The New Face of the Taliban,” *Terrorism Monitor*, Vol. 5, Issue 9 (May 14, 2007). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=4147](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=4147)

⁵⁰⁶ Ibid.

⁵⁰⁷ Iqbal Khattak, “Wazir tribesmen wary of Uzbek militants’ return to South Waziristan,” *Daily Times* (Lahore), January 31, 2008.

⁵⁰⁸ Ibid. In addition to providing Nazir with finances and material, during his battles with the IMU, the Pakistani military reportedly also supplied “medical cover to Nazir’s forces and also helped him secure the bases vacated by the Uzbeks.” Abbas, “South Waziristan’s Maulvi Nazir: The New Face of the Taliban.”

⁵⁰⁹ Dressler “The Haqqani Network: From Pakistan to Afghanistan,” Institute for the Study of War (2010), p. 4.

⁵¹⁰ “‘Maulvi Nazir’ among 17 killed in Taliban infighting,” *Daily Times* (Lahore), August 17, 2009, “Pakistan Taliban Faction Kills 17 Rivals in Ambush,” *Reuters*, August 16, 2009.

5. Mullah Omar

It is believed that Mullah Mohammed Omar was born around 1960.⁵¹¹ He joined the Mujahedeen in their anti-Soviet war. "In 1994, Mullah Omar founded the Taliban movement, made up mainly of students from Islamic religious schools and Afghan refugees in Pakistan. The idea was to combat post-war lawlessness in his country. He captured Kabul two years later without a fight, which many Afghans welcomed, believing it would mark an end to the civil war."⁵¹² He declared his government as an Islamic Emirate. Following the September 11 attacks, he refused to hand over Osama Bin Laden to the US, which led to the US invasion of Afghanistan. Since then, Omar has gone into hiding. Though unknown, it is generally believed he is hiding in the mountainous areas along the Afghan-Pakistani border.

6. Qari Hussain Mehsud

Qari Hussain Mehsud was killed in the October 2010 drone strike.⁵¹³ As Syed Saleem Shahzad said, his "specialty was training suicide bombers."⁵¹⁴ Mehsud, who was born around 1988 in South Waziristan, moved to Karachi to continue his Islamic studies. However, he did not finish his education and join[ed] the Lashkar-e-Jhangvi, a banned anti-Shi'ite militant organization. During the first battle of Swat in 2007, he "joined the fray with his suicide squad."⁵¹⁵ Mehsud successfully "established a reign of terror across the valley."⁵¹⁶ He then "moved back to South Waziristan and soon won notoriety for brutally killing anti-Taliban figures and for introducing the practice of slitting the throats of Pakistani soldiers. He developed his own network and began training suicide bombers."⁵¹⁷

7. Maulana Waliur Rahman

Waliur Rehman is from the Mehsud tribe and has been a member of the TTP and its parent organizations since 2004. Even though in 2006 he was selected as Baitullah Mehsud's deputy, it was in 2007 when he took over the TTP's finances.⁵¹⁸ He was the "most trusted advisor" of Mehsud, although their characters were not alike. Rehman never fought in Afghanistan against the USSR and was not as aggressive as Mehsud.⁵¹⁹ He was also a potential candidate for the leadership of the TTP after the death of Baitullah. However, as the *Amir* of the TTP in South Waziristan, he "controls the resources and fighters in the organization's birthplace and stronghold. In a way, the new TTP leader Hakimullah Mehsud would be dependent on him for money and manpower."⁵²⁰

8. Maulana Fazlullah

Fazlullah was born in 1975 in a farmer's family.⁵²¹ He is a son-in-law of Maulana Sufi Mohammad, whose movement had a notorious reputation for its "violent campaign" for the enforcement of Sharia laws in the

⁵¹¹ Ben Farmer, "Mullah Mohammad Omar: profile of the one-eyed Taliban leader," *The Telegraph*, May 23, 2011. Available at: http://www.telegraph.co.uk/news/worldnews/al_Qaida/8531476/Mullah-Mohammad-Omar-profile-of-the-one-eyed-Taliban-leader.html

⁵¹² "Profile: Mullah Mohamed Omar," *Aljazeera*, July 27, 2009. Available at: <http://www.aljazeera.com/news/asia/2009/07/200972791512796265.html>

⁵¹³ Arif Jamal, "More power to the Haqqani network," *Asia Times*, August 9, 2009. Available at: http://www.atimes.com/atimes/south_asia/mh09df01.html

⁵¹⁴ Syed Saleem Shahzad, "Drones ever-closer to Pakistan's militants," *Asia Times*, October 27, 2010. Available at: http://www.atimes.com/atimes/South_Asia/LJ27Df02.html

⁵¹⁵ Ibid.

⁵¹⁶ Ibid.

⁵¹⁷ Ibid.

⁵¹⁸ "Who is Who in the Pakistani Taliban," Naval Postgraduate School Program for Culture and Conflict Studies, Available at: http://www.nps.edu/Programs/CCS/Docs/Pakistan/Pakistan_Taliban_Bios.pdf

⁵¹⁹ Mukhtar A. Khan, "The Hunt for Pakistan's Most Wanted Terrorists," *Terrorism Monitor* Vol. 7, No. 34, November 13, 2009. Available at: http://www.jamestown.org/uploads/media/TM_007_09482c.pdf

⁵²⁰ Rahimullah Yusufzai, "Second in Command," September 10, 2009. Available at: <http://www.newsline.com/2009/09/second-in-command/>

⁵²¹ Afzal Khan, "Revolt in Pakistan's NWFP: A Profile of Maulana Fazlullah of Swat," The Jamestown Foundation, (November 20, 2007). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=4555](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=4555)

region between 1994 and 1996.⁵²² He started his education at a government school, and continued in Sufi Mohammad's madrasah (a religious school). Despite his failure in obtaining any certificate of religious education that was accepted by the Pakistani madrasah authority; he "began teaching Islam in a mosque-cum-madrasah in his village, leading prayers and giving sermons."⁵²³

After the US attacked Afghanistan in November 2001, Fazlullah joined his father-in-law and thousands of other TNSM fighters against the US. Fazlullah and his father-in-law escaped back to Pakistan and were arrested only after "Pakistani jihadi groups were routed" in Afghanistan. After spending 18 months in jail, "in 2004, he set up a clandestine FM radio channel to preach directly to villagers. He then came to be known as Radio Mullah."⁵²⁴ His radio promoted "fundamental Wahabbi/Taliban values such as the prohibition of music, dancing and television shows. He also preached for women to strictly observe the purdah (concealment of the female body from men) and discouraged them from seeking education."⁵²⁵

C. Ideology

A collective TTP ideology, in the broadest sense, can be conceptualized as having two components: First, TTP members nominally grant the worldwide community of Muslims (henceforth the *umma*) precedence over national or ethnic affinity or interests. This is a characteristic shared by all violent global Islamist organizations. However, when contrasted with these other groups (such as Al Qaida or the Afghan Taliban), the TTP's relative identification with the *umma* is arguably the weakest since regional identification defines and guides the movement at periodic critical moments, superseding consideration of the broader *umma*.⁵²⁶ Regardless, concerns for the *umma* are central to the TTP's ideology and they are violently actualized in the TTP's second central ideological component, *jihad*. The TTP is committed to an offensive jihad that liberates the *umma* from perceived apostate rule and purges it of elements understood to be impure.⁵²⁷ Both of these broad elements of the TTP's creed—general priority for the *umma* and *jihad*—can further be broken down into three, often overlapping and more precisely manifested, ideological components: 1) **Deobandi Islamism**, the most unifying element of the TTP's ideology that nonetheless allows for collaboration with groups from the two other predominant Islamist ideologies: Salafists and, at times, South Asian Wahhabi (Ahl-i Hadith) groups; 2) **anti-Shi'ism**, another synthesizing ideological characteristic; and 3) **apocalyptic eschatology**, an integrative paradigm that allows the TTP and its allies to view their tactical and strategic efforts as complementary, preordained, and in fulfillment of divine prophecy.

a. Deobandi Islamism

Despite the PNT's deep and ongoing fractures, bonds with the Afghan Taliban have remained unbreakable because of the PNT's overall adherence to contemporary Deobandi principles.⁵²⁸ Beginning with the Soviet–Afghan War (1979–1989) and extending into the subsequent Afghan civil war (1989–present), Pakistan has witnessed a proliferation of *madrassas*.⁵²⁹ Most of these schools were founded and administered by Jami'at

⁵²² Ibid.

⁵²³ Ibid.

⁵²⁴ Ibid.

⁵²⁵ Ibid.

⁵²⁶ This view stands in partial contrast to what Mariam Abou Zahab and Olivier Roy have argued (however, they based their opinion on the Pakistani Taliban milieu circa 2004). Given events over the last half-decade, Abou Zahab and Roy would arguably revise their sentiments to one that is more in harmony with this author: "Even if movements have identified themselves with a precise territorial area, in the way that the Taliban always wished to be recognized the legitimate government of Afghanistan, or as the Pakistani groups insisted on a Pakistani identity, they have nevertheless refused to be constricted by regional identifications." Mariam Abou Zahab and Olivier Roy, *Islamist Networks: The Pakistan-Afghan Connection* (London: Hurst and Company, 2004), p. 2.

⁵²⁷ For example, customs and cultures that are not based on their perception of the *Qur'an*, the *Sunna* and *Shāri'a*.

⁵²⁸ Jamal, "The Growth of Deobandi Jihad in Afghanistan."

⁵²⁹ Pakistan has five distinct types of *madrassas*. They are dominated by, first and second, the Deobandi and Bareilvi (or, Bareilvi) traditions. Third, the puritanical Salafi and, fourth, the Ahle Hadith minority Pakistani Muslims have their own schools. Finally, fifth, Jamaat-e-Islami (JI) has its own school. See "Pakistan: Madrasas, Extremism and the Military," *Asia Report* N° 36, International Crisis Group (July 29, 2002), p. 1. See also Barbara D. Metcalf, "Traditionalist Islamic

Ulema-e-Islam (JUI), a guardianship ensuring that the Deobandi school of Sunni Islam guided the *madrassas'* curricula.⁵³⁰ Traditional Deobandi teachings—aligned with the *Hanafi* School of Islamic law, which is considered the most liberal of the four schools—were described as “forward-looking” and committed to harmonizing “the classical Sharia texts with current realities.”⁵³¹ However, beginning in the early 1980s with Zia al-Haq’s efforts to Islamize Pakistan, this tradition was abandoned as semi-educated mullahs running *madrassas* expounded a form of Islam that was unrecognizable to their Deobandi progenitors. Students were indoctrinated into a system that revolved around a fundamentalist interpretation of the *Qur’an* and a narrow and rigid application of *Shāri’a*. The broad goals of these teachings promote beliefs perceived as representing “pure” Islam and actions intended to restore its pristine nature—which supposedly existed during the “Golden Age” of Islam (610-850 C.E.).⁵³²

b. Anti-Shi’ism

Violently combating the perceived heretical nature of Shi’ism is the *raison d’être* for some of the PNT’s most prominent allies.⁵³³ While less passionate in their disdain, the PNT’s grounding in Deobandism—whose senior ulama⁵³⁴ have endorsed a fatwa declaring Shi’ites infidels since 1940⁵³⁵—ensures a consistent attitude of belligerence towards Shi’ism. Anti-Shi’ite violence grew markedly in the late 1970s and 1980s, as General Zia sought to blunt Shi’ite revanchism in the wake of the Iranian revolution. Under the aegis of Pakistan’s ISI, militants exemplified by groups like LeJ organized themselves with the “sole aim” of killing Shi’ites.⁵³⁶ Since the late 1990s, such groups have added an anti-Western animus to their doctrine.⁵³⁷ Having largely turned on the Pakistani state, groups including LeJ and Sipah-e-Sahaba (SSP: Army of the Companions of the Prophet) are now PNT allies and, consequently, their anti-Shi’ite fierceness is being actualized in the tribal areas. Reports indicate that captured Shi’ite Pakistani security members are now routinely and “casually” beheaded by their PNT captors while their Sunni counterparts are often released.⁵³⁸ Moreover, Shi’ite civilians living in the tribal areas—especially those in the Kurram agency’s Parachinar region—are indiscriminately targeted.⁵³⁹

c. Apocalyptic eschatology

Elements of the TTP and some of their allies are bound by a belief that the Taliban’s resurgence heralds the prophesized “End Times.” Specifically, the geographic regions historically referred to as Khurasan that they seek to “liberate” are believed to be the focal point from where the Mahdi⁵⁴⁰ will arise.⁵⁴¹ *Hadith*⁵⁴² traditions

Activism: Deoband, Tablighis, and Talibs,” Social Science Research Council, after September 11 Archive, 2002.

Available at: <http://essays.ssrc.org/sept11/essays/>

⁵³⁰ Rashid, *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*, p. 88-89. Of the estimated 13,000 *madrassas* in Pakistan, over 8,300 are reportedly Deobandi in nature. “Pakistan: Madrasas, Extremism and the Military,” p.6.

⁵³¹ Rashid, *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*, p. 88.

⁵³² Ibid. A seminal history of the Deobandi movement can be found in, Barbara Metcalf, *Islamic Revival in British India: Deoband, 1860-1900* (Karachi: Oxford University Press, 1989).

⁵³³ As discussed earlier in this report, factions of the PNT also target Sufis, a trend that has grown in 2010-2011.

⁵³⁴ The *ulema*, plural of “*alim*,” are doctors and scholars of Muslim law.

⁵³⁵ S. V. R. Nasr, “The Rise of Sunni Militancy in Pakistan: The Changing Role of Islamism and the Ulama in Society and Politics” *Modern Asian Studies*, Vol. 34, No. 1 (February 2000), p. 162.

⁵³⁶ Abou Zahab and Roy, *Islamist Networks*, p. 64.

⁵³⁷ Some of the PNT’s allies are not known to be strongly anti-Shi’ite, for example, LeT. Moreover, it has been reported that Harakat ul Mujahidin and Harakatul-Jihad al-Islami “strongly share the anti-Shia feelings of [LeJ], but they do not indulge in targeted attacks on Shias and their places of worship. Many of the leaders of these organizations, including Maulana Masood Azhar, the Amir of the Jaidh e-Mohammad, started their jihadi career in [Sipah-e-Sahaba], but later drifted away from it since they felt uncomfortable with its targeted attacks on Shias and their places of worship.” B. Raman, “The Punjabi Taliban,” *International Terrorism Monitor*, Paper No. 566. October 12, 2009. Emphasis added.

⁵³⁸ Ibid.

⁵³⁹ In contrast, there are reports of the Sunni minority of Parachinar being victims of the Shi’ites’ “reign of terror.” See, for example, Farah Taj, “The Punjabi and Pakhtun IDPs of Parachinar,” *Daily Times* (Lahore), January 16, 2010.

⁵⁴⁰ Jeffrey M. Bale has explained that, “[t]he term *mahdi* (literally ‘the [rightly] guided one’) applies above all to the prophesied redeemer of Islam who is destined to emerge and transform the world into a perfect Islamic society before the Day of Resurrection (*yawm al-qiyama*), at which point he will fight alongside the returned Jesus ... against the Dajjal

depict the Mahdi leading his followers from combat victory in Khurasan—perceived by some militants to be those battles that are now taking place in Afghanistan and the tribal areas of Pakistan—before moving through Iran, Iraq, Syria and ultimately battling the anti-Christ in Palestine.⁵⁴³ While it is unlikely that all members of the TTP and their allies perceive their struggle as part of this larger campaign, there is arguably a general belief that a precursor to the liberation of Jerusalem is the liberation of Kabul.⁵⁴⁴ “Based on this latter notion,” explains Syed Saleem Shahzad, “jihadi websites are calling on Muslims to support the Afghan jihad.”⁵⁴⁵

5. Pashtunwali

Another notion shaping the ideology of the TTP is *Pashtunwali*. In general, it stands for the tribal ethics that each Pashtun must follow. “*Pashtunwali*, which means “the way of the Pashtuns” or “the code of life,” is an unwritten code of ethics that traditional Pashtuns follow.”⁵⁴⁶ As Kalman explains, *Pashtunwali* includes nine main principles:

- “*Melmastia* is hospitality. Every Pashtun must welcome visitors warmly;
- *Nanawalti* means that people running from the law are allowed to seek refuge and shelter, and that people are required to offer it to them;
- *Badal* gives people the right to feud with families who harm them or a family member;
- *Tureh* is bravery;
- *Sabat* is loyalty to one’s family, friends, and tribe members;
- *Imandari* is righteousness. It requires that people behave according to morals;
- *Isteqamat* means persistence in everything that people do, from their studies to their beliefs;
- *Ghayrat* gives people the right to defend their property, their honor, and their family honor;
- *Namus* means that men must defend women against danger at all costs.”⁵⁴⁷

All items above are main factors in understanding the TTP members’ ideology. However, these are not the only elements that shape leadership’s methods and objectives. Joby Warrick explains, “It is not so much

(the Deceiver, i.e., Antichrist or false messiah). The word does not appear first in the *Qur’an* itself, but rather in early collections of *hadith* that are considered reliable.” Bale, “Jihadist Ideology and Strategy and the Possible Employment of WMD,” p. 48. Although Muslim eschatology is typically associated with Shi’ism, the ‘signs of the times,’ the Antichrist and the coming of the Mahdi are all part of accepted Sunni fundamentalist discourse (although fewer Sunnis perceived that their activities are part of the “end-time” scenario). Prominent Sunni militants have explained that they have “no doubt that the awaited Mahdee (sic) will come forth from among the Ummah of the Prophet at the end of time. We believe in the Signs of the Hour. The appearance of ad-Dajjal. The descent from heaven of ‘Isa, son of Mary. The sun rising from the West. The emergence of the Beast from the earth. And other signs mentioned in the Qur’an and the authentic Hadeeth of the Prophet.” Najeh Ibrahim, Asim Abdul-Maajid and Esam ud-Din Darbaalah, *In Pursuit of Allah’s Pleasure* (London: Azzam Publishers, 1997), pp. 30-31. As quoted in David Zeidan, “A Comparative Study of Selected Themes in Christian and Islamic Fundamentalist Discourses,” *British Journal of Middle Eastern Studies*, Vol. 30, No. 1 (May, 2003), p. 71

⁵⁴¹ An area that includes Afghanistan, parts of Iran, Pakistan’s tribal areas, Turkmenistan and parts of Uzbekistan.

⁵⁴² An exploration of how the Mahdi was handled, vis-à-vis transmission of the *Hadith*, can be found in Wilferd Madelung, “Abd Allāh B. Al-Zubayr and the Mahdi,” *Journal of Near Eastern Studies*, Vol. 40, No. 4, (October, 1981), pp. 291-305.

⁵⁴³ See David Cook, *Contemporary Muslim Apocalyptic Literature* (Syracuse, NY: Syracuse University, 2005), p. 173.

See also Syed Saleem Shahzad, “Plot to Divide the Taliban Foiled,” *Asia Times Online*, July 23, 2008. Available at: http://www.atimes.com/atimes/South_Asia/JG23Df01.html

⁵⁴⁴ Cook, *Contemporary Muslim Apocalyptic Literature*, p. 174. David Cook has explained how Abdallah ‘Azzam—considered to be Bin Laden’s mentor—“popularized the position of Afghanistan as the messianic precursor to the future liberation of Palestine from Israel.” Ibid, pp. 173-174. For a description of Azzam and his view on the Mahdi see David Zeidan, “The Islamic Fundamentalist View of Life as a Perennial Battle,” *Middle East Review of International Affairs*, Vol. 5, No. 4 (December 2001). Available at: <http://meria.idc.ac.il/journal/2001/issue4/jv5n4a2.htm>

⁵⁴⁵ Syed Saleem Shahzad, *Inside Al Qaida and the Taliban*, (London: Pluto Press, 2011), p.118.

⁵⁴⁶ Bobbie Kalman, *The People of Afghanistan*, (New York: Crabtree Publishing Company), p.13.

⁵⁴⁷ Ibid.

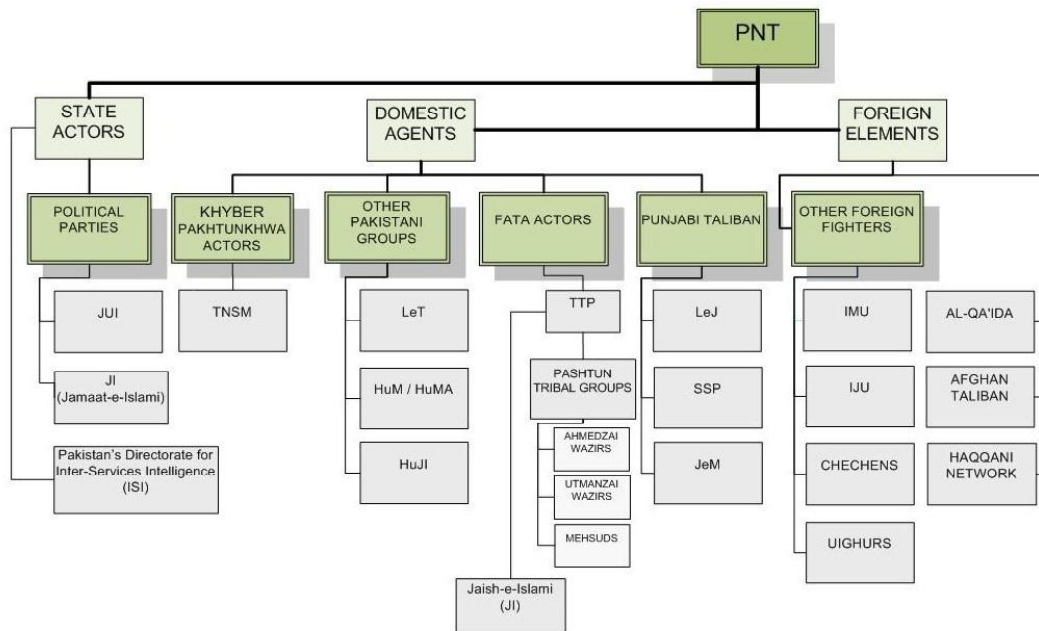
about ideology. It is more of tactical goals. Those aims are revenge and to reduce drone strikes by the US. Hakimullah is obsessed with getting revenge.”⁵⁴⁸ The revenge factor becomes more important when considering the *badal* element in Pashtunwali as well.⁵⁴⁹

D. Constituents

⁵⁴⁸ Charles P. Blair’s interview with Joby Warrick, October 2, 2011

⁵⁴⁹ See Nasreen Ghufra, “Pushtun Ethnonationalism and the Taliban Insurgency in the North West Frontier Province of Pakistan” *Asian Survey*, Vol. 49, No. 6 (November/December 2009).

1. Address the leadership's perceptions of the group's links to constituencies.

Figure 16: TTP's position within the larger Taliban movement⁵⁵⁰a. United Council of Action (MMA)⁵⁵¹

The Afghan Taliban's entrenchment in the tribal areas was essentially formalized by political developments in 2002. Capitalizing on anti-US sentiment and support from President Musharraf as he sought to gain domestic legitimacy by weakening his sectarian political opponents,⁵⁵² a coalition of religious parties, the Muttahida Majlis-e-Amal (MMA: United Council of Action) was able to win enough seats in Pakistan's National Assembly⁵⁵³ to form a new provincial government in Khyber Pakhtunkhwa and Balochistan.⁵⁵⁴

⁵⁵⁰ Charles P. Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban* (Washington, DC: The Federation of American Scientists, 2011)

⁵⁵¹ Larry P. Goodson, "The 2008 Election" (Pakistan), *Journal of Democracy*, Vol. 19, No. 4 (October 2008), pp. 5-15

⁵⁵² Musharraf's aim with the 2002 election primarily revolved around legitimizing the army's role as head of the government giving it a "permanent political role." To accomplish this Musharraf devised a stratagem (that the ISI actualized) of weakening the secular parties while strengthening the religious parties. Ultimately, Musharraf hoped to create "a hung parliament in which the military would become the main power broker." Rashid, *Descent into Chaos*, p. 157.

⁵⁵³ These MMA election victories occurred in the lower house of Pakistan's bicameral Parliament. Pakistan's Parliament consists of an upper house, the Senate, and the more powerful lower house, or National Assembly. The third component to Pakistan's Parliament is the President of Pakistan. The National Assembly has 342 seats. Of these, 272 are filled by direct election with the remaining seats reserved for women (60) and non-Muslims (10). "The Conduct of General Elections," Election Commission of Pakistan, *Election Laws: Conduct of General Elections*. Available at: <http://www.ecp.gov.pk/index.html>

⁵⁵⁴ For purposes of, *inter alia*, the National Assembly's political representation, FATA is considered part of Khyber Pakhtunkhwa. In order to take power in Balochistan, the MMA had to form an alliance with Musharraf's Pakistan Muslim League (PMLQ: Quaid-i-Azam).

Despite losing many of its gains in the subsequent 2008 election, during its tenure the Jamiat Ulema-e-Islam (JUI)-dominated MMA⁵⁵⁵ was able to pursue pro-Taliban policies, specifically, “creating the ideological and religious atmosphere for the [Afghan and Pakistani tribal area] insurgency, and in teaching and training [jihadist] recruits.”⁵⁵⁶ Although none of its coalition parties have officially admitted assisting the Taliban, the MMA has made little attempt to hide its support. For example, it has engaged in recruitment and fund raising to assist the Afghan Taliban’s efforts against US-led coalition forces.⁵⁵⁷ The MMA’s pro-Taliban nature is hardly surprising: Most of the Taliban’s leadership attended *madrassas* run by its two primary leaders, Samiul Haq and Fazlur Rehman.⁵⁵⁸ In addition, during its time in power, the MMA was able to significantly legitimize the TTP by championing several of its social platforms, i.e. legally adopting and enforcing stricter *Shāri’a* implementation in Khyber Pakhtunkhwa and supporting the establishment of a “vice and virtue” police, along the lines of the Taliban’s Department for the Promotion of Virtue and Prevention of Vice.⁵⁵⁹ Finally, it is significant that all of the pro-Taliban political activities associated with the MMA during its time of politically-legitimized power in the tribal areas undoubtedly desensitized many in Pakistan to the ideological extremism of the TTP and Al Qaida.

b. Jamiat Ulema-e-Islam (JUI)

Founded in 1945 by Deobandis strictly as a religious movement to disperse their articles of faith and muster the sect’s followers, JUI became a political party in 1962. During the Soviet–Afghan War, JUI was excluded from directly working with the ISI in recruiting and supplying *mujahidin* (in contrast to the central roles played by JI and Hizbe-Islami).⁵⁶⁰ Beginning in the early 1980s, JUI took the lead in establishing *madrassas* in Pakistan’s tribal areas; most of the Afghan Taliban’s leadership attended *madrassas* run by JUI’s two branches.⁵⁶¹ These two organizations, both of which are members of the MMA, are:

i. Jamiat Ulema-e-Islam-Fazl (JUI-F)

Headed by Maulana Fazlur Rehman⁵⁶², the JUI-F reportedly has “profound links” to SSP⁵⁶³ yet it claims only to support SSP’s ideology and not its methods.⁵⁶⁴ Although Rehman was a signatory to Osama bin Laden’s 1998 International Islamic Front for Jihad against the Jews and Crusaders,⁵⁶⁵ since at least 2005, JUI-F has reportedly distanced itself from Al Qaida.⁵⁶⁶ Several unsuccessful assassination attempts have recently been made against Rehman, i.e. TNSM-linked elements of the PNT are believed to be behind them.⁵⁶⁷

⁵⁵⁵ Jamiat Ulema-e-Islam (JUI) is a Pakistani Sunni Islamist (Deobandi) political party that dominates the MMA. The four other parties of the MMA (all of which can also be described as Islamist) are: Jamiat Ulema-e-Pakistan (JUP), Jamiat-e-Ahle Hadith, Pakistan Isami Tehrik (ITP) (formerly TeJ: Tehriq-e-Jafaria), and the Jamaat-e-Islami (JI). This last group, JI, demonstrated again the MMA’s pro-jihadist nature when Khalid Sheikh Muhammad was captured in a house reportedly owned by the JI women’s wing. See Magnus Norell, “The Taliban and the Muttahida Majlis-e-Amal (MMA)” *China and Eurasia Forum Quarterly*, Vol. 5, No. 3 (2007), p. 71.

⁵⁵⁶ Norell, “The Taliban and the Muttahida Majlis-e-Amal (MMA),” *passim*. From 2002-2008 MMA held the balance of power in the National Assembly with 68 seats (up from two previously). As a result of the 2008 elections the MMA’s National Assembly seats went down to six and it consequently lost its leadership.

⁵⁵⁷ International Crisis Group, *Pakistan: The Mullahs and the Military*, Asia Report No. 49, (March 20 2003), p. 4.

Available at: http://www.crisisgroup.org/library/documents/report_archive/A400925_20032003.pdf

⁵⁵⁸ Norell, “The Taliban and the Muttahida Majlis-e-Amal (MMA),” p. 70. As explored later in this profile, Fazlur Rehman is now the target of the inter-TTP sectarian war. In April 2011, for example, he was reportedly the target of two TTP-related suicide bombings. Technically the plural of *madrassa* is *madaris*. This study uses the more familiar “*madrassas*” for convenience.

⁵⁵⁹ Rashid, *Descent into Chaos*, pp. 159-161.

⁵⁶⁰ Rashid, *Taliban: Militant Islam, Oil and Fundamentalism in Central Asia*, pp. 88-89.

⁵⁶¹ Norell, “The Taliban and the Muttahida Majlis-e-Amal (MMA),” p. 70.

⁵⁶² See discussion above on HuJI and HuM.

⁵⁶³ Magnus Norell, “The Taliban and the Muttahida Majlis-e-Amal (MMA),” p. 73.

⁵⁶⁴ Zahab and Roy, *Islamist Networks*, p. 23.

⁵⁶⁵ “International Islamic Front” (SATP).

⁵⁶⁶ “The State Of Sectarianism in Pakistan,” p. 21.

⁵⁶⁷ See, “Suicide Bomber Attacks JUI-F Chief’s Convoy, 12 Killed,” Daily Times (Lahore), April 1, 2011. Available at: http://www.dailytimes.com.pk/default.asp?page=2011/04/01/story_1-4-2011_pg1_1 See also, Jamal, “Pakistani Taliban Widen Jihad with Strikes on Fellow Muslims.”

ii. Jamiat Ulema-e-Islam Sami ul-Haq (JUI-S)

Headed by Maulana Sami ul-Haq as the head of the *madrassa* Darul uloom Haqqania—the *madrassa* that produced Mullah Omar and many other early Taliban leaders—Sami ul-Haq is sometimes referred to as “the father of the Taliban.”⁵⁶⁸ A former senator said to be “virulently” anti-American, Sami ul-Haq is reported to have strong ties with the contemporary leadership of the Afghan Taliban.⁵⁶⁹

c. Jamaat-e-Islami

Prominent experts regard JI’s founder Syed Abul A’ala Maududi (1903-1979) as the founder of Islamism along with Hassan al-Banna.⁵⁷⁰ Maududi founded JI, which is Pakistan’s oldest religious party, in 1947. Until the 1980s, JI was Pakistan’s most prominent religious party, “enjoying a virtual monopoly on political Islam.”⁵⁷¹ As the best-organized party in the MMA coalition, JI has direct ties to the Taliban. During the Afghan–Soviet War, JI established at least two *mujahidin* training camps in Afghanistan.⁵⁷² JI, which is another group with “profound links” to SSP, was a primary force behind the insurgency in Kashmir.⁵⁷³ The party has links to the Taliban and Al Qaida;⁵⁷⁴ the latter’s “attacks after 9/11 in Pakistan and abroad would have been impossible without the support ... provided by ... mainstream Islamic parties such as Jamiat-e-Islami.”⁵⁷⁵

Despite links to jihadists, to date JI has not directly entered into the realm of domestic violence and is presently hoping to acquire power via political route.⁵⁷⁶ This position has generated considerable enmity from factions of the TTP. JI leaders have been targeted by several suicide bombing and assassinations. Several of these attacks have reportedly originated with TNSM: Sufi Mohammad, the leader of TNSM, has “accused the JI leaders of deviating from Maududi’s example” and numerous TNSM commanders have reportedly portrayed JI “as a bigger threat than the Americans.”⁵⁷⁷

In sum, Pakistan’s Sunni religious parties, especially JUI and JI, have historically acted as enablers of the TTP and other jihadists. Their support from the Pakistani army in general and the ISI specifically has been robust and, despite perennial declarations by Pakistani authorities to the contrary, there are no indications that its benefaction has diminished since 2001.

d. The ISI⁵⁷⁸

Some regional experts believe that ISI not only passively allowed the Afghan Taliban and its jihadist allies to fortify their position in Waziristan, but implemented specific plans “to create a broad ‘Talibanized belt’ in FATA that would keep the pressure on [Afghan President Hamid] Karzai to bend to Pakistani wishes, keep

⁵⁶⁸ Imtiaz Ali, “The Father of the Taliban: an Interview with Maulana Sami ul-Haq,” *Spotlight on Terrorism Violence*, Vol. 4, Issue, 2 (May 23, 2007). Available at:

[http://www.jamestown.org/programs/gta/single/?tx_ttnews\[tt_news\]=4180&tx_ttnews\[backPid\]=26&cHash=2feb32fe98](http://www.jamestown.org/programs/gta/single/?tx_ttnews[tt_news]=4180&tx_ttnews[backPid]=26&cHash=2feb32fe98)

⁵⁶⁹ Sohail Mahmood, *Good Governance Reform Agenda in Pakistan* (New York: Nova Science Publishers, 2007) p. 74.

⁵⁷⁰ Author’s discussion with Jeffrey M. Bale, February 12, 2010. Hassan al-Banna: Author’s discussion with Sammy Salama, January 10, 2006.

⁵⁷¹ Zahab and Roy, *Islamist Networks*, p. 19.

⁵⁷² *Ibid.*, p. 49.

⁵⁷³ “The State Of Sectarianism in Pakistan,” *Asia Report N° 95*, International Crisis Group (April 18, 2005),” p. 12.

⁵⁷⁴ Reportedly several al-Qa’ida members have been protected and supported by JI. Khalid Sheik Mohammed, for example, was given refuge in Rawalpindi by JI after 9/11. Rashid, *Descent in to Chaos*, p. 226.

⁵⁷⁵ *Ibid.*, p. 227.

⁵⁷⁶ One of its political platforms is opposition to the Nuclear Non-Proliferation Treaty (NPT). See Zahab and Roy, *Islamist Networks*, p. 20.

⁵⁷⁷ Arif Jamal, “Pakistani Taliban Widen Jihad with Strikes on Fellow Muslims,” *Terrorism Monitor*, Vol. 8, Issue 28 (July 16, 2010). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=36620](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36620)

⁵⁷⁸ For an overview of the ISI’s support of domestic violent Sunni Islamists and pan-Islamist jihads abroad, see Shaun Gregory, “The ISI and the War on Terrorism,” *Studies in Conflict & Terrorism*, Vol. 30, No. 12 (2007), pp. 1013-1031 and Ashley J. Tellis, “Pakistan’s Record on Terrorism: Conflicted Goals, Compromised Performance,” *The Washington Quarterly*, Vol. 31, No. 2 (Spring 2008), pp. 7-32.

US forces under threat while maintaining their dependence on Pakistani goodwill, and create a buffer zone between Afghan and Pakistani Pashtuns.”⁵⁷⁹ Ahmed Rashid has summarized the ISI’s perception of this post-2001 Pakistani strategy as one that would ensure “a Talibanized Pashtun population along the border [that] would pose a threat to Karzai and the Americans *but no threat to Pakistan*, which would be in control of them.”⁵⁸⁰

Considered the least funded and poorest trained soldiers in the Pakistani military, the Frontier Corp (FC) is composed of soldiers recruited from the tribal areas and officers drawn from the Pakistani army (its deployment to the tribal areas included elements of the army’s 11th Corps). Traditionally they were the armed extension of the Political Agent’s (PA) writ in the tribal areas. There have been reports that the ISI knew of the planned ambush on the FC in March 2004 but chose not to issue a warning.⁵⁸¹

On May 22, 2011, Al Qaida attacked the Mehran naval air station in Karachi, killing at least 10 people and destroying two United States-made P3-C Orion surveillance and anti-submarine aircraft, each worth US \$36 million. The ISI is suspected of involvement in this attack. According to Shahzad, militants carried out the attack with insider assistance: “Insiders at PNS Mehran provided maps, pictures of different exit and entry routes taken in daylight and at night, the location of hangers and details of likely reaction from external security forces.”⁵⁸²

2. Financial backing

When considered collectively, the TTPs financial revenue sources—parallel governance, criminal undertakings, and interactions with other terrorist organizations and state institutions—add up to possibly as much as \$100 million or more in total [non-annual] assets. Even when accounting for revenue sources that were transient (e.g., relocation of those militants fleeing Afghanistan in 2001-2002) or perennial income streams that can diminish (such as the loss of de facto governing status in areas temporarily reclaimed by Pakistani authorities), it is highly likely that the TTP still has at least tens of millions of dollars at its disposal, most of it under the command of the TTP and its closest allies.

E. Specialists in the Group

The TTP has demonstrated a variety of operational capabilities. Apart from straightforward terrorist acts, the TTP has operated as an effective army, e.g. the First and Second Battles of Swat, and as a formidable insurgency movement, e.g. the first four Battles of Waziristan. It is these capabilities that would likely serve the TTP well when attempting to acquire fissile materials or intact nuclear warhead components. TTP operations that are more traditional acts of “terrorism” involving far fewer men have highlighted three themes of operational capability: First, the TTP is capable of penetrating targets that ostensibly incorporate some of Pakistan’s highest security measures. This includes then-President Musharraf’s motorcade, Benazir Bhutto’s entourage, the Army’s General Headquarters (GHQ) in Rawalpindi, the ISI’s provisional headquarters in Lahore, the CIA’s Camp Chapman location, and Pakistan Naval Station Mehran, etc. Second, core TTP members, with the exception of one attack (Camp Chapman), have limited their operations to Pakistan.⁵⁸³ This does not indicate an inability to conduct transnational operations; however, it does highlight the TTP’s proclivity for using domestic disguises typically in Pakistani police or military

⁵⁷⁹ Rashid, *Decent in Chaos*, p. 269.

⁵⁸⁰ Ibid, pp. 269-270. Emphasis added. See also John R. Schmidt, “The Unraveling of Pakistan,” *Survival*, Vol. 51, No. 3 (June-July 2009), p. 34.

⁵⁸¹ See Thomas H. Johnson and M. Chris Mason, “No Sign Until the Burst of Fire: Understanding the Pakistan – Afghanistan Frontier,” *International Security*, Vol. 32, No. 4 (Spring 2008), pp. 47-77. See also Eric Schmitt, Mark Mazzetti, and Carlotta Gall, “US Hopes to Arm Pakistani Tribes against Al Qaeda,” *The New York Times*, November 18, 2007. For details on the ISI’s alleged foreknowledge of the ambush, see Rashid, *Descent into Chaos*, p. 271.

⁵⁸² Syed Saleem Shahzad, “Interview had warned of Pakistan strike,” *Asia Times*, May 27, 2011. Available at: http://www.atimes.com/atimes/South_Asia/ME27Df06.html

⁵⁸³ It can be argued that the TTP is operational in the West as well; this is at least the case with “inspired” individuals and cells that may have been trained in Pakistan. Faisal Shazad, who attempted the Time Square car bombing in May 2010, would be an example of this.

uniforms, and its likely links to at least mid-level members of the ISI vis-à-vis its ability to successfully infiltrate highly secure targets. Finally, having accessed various targets, the TTP is typically capable of successfully employing relatively sophisticated and very large explosive devices.

a. ISI Trained Kashmiri Fighters: Adaptation of Kashmiri Jihadist Tactics

The 2003 rapprochement between New Delhi and Islamabad initiated the latter's abrupt abandonment of Kashmiri and pan-Islamist jihadists that it had been supporting for years. Radicalized by their abandonment by Islamabad, these jihadists embraced the idea of the present Pakistani government being Washington's puppet.⁵⁸⁴ With no relocation or recompense plan in place, these jihadists were left adrift, largely moved by the currents of jihadist movements in other areas.⁵⁸⁵ It was natural, therefore, for large numbers of these fighters to be drawn toward their ideological counterparts in the tribal areas and once established, to show little compunction about targeting the state that once embraced them.⁵⁸⁶

As explored in the historical narrative of the TTP, the influx into FATA of jihadists formerly active in the Kashmiri struggle significantly altered the TTP's composition. These battle-hardened jihadists, many of whom were extensively trained in guerilla operations by the ISI, brought with them the skills and will to alter the struggle from a local defensive jihad against the Indian military into an offensive regional jihad against the Pakistani state and perhaps, a global jihad. Principal among the tactics brought to the TTP by the Kashmiri jihadists were those related to waging a prolonged war against India as well as target-oriented missions within that country.⁵⁸⁷ Such tactics and skills were easily transferable to the struggle against the Pakistani state.

i. Lashkar-e-Tayyiba (LeT)

TTP personnel with LeT origins are likely to be more highly-educated than their TTP counterparts. It has been reported that "LeT draws recruits from universities and colleges as well as from among unemployed youth,"⁵⁸⁸ while reportedly only ten percent of LeT's makeup has gone through a *madrassa*.⁵⁸⁹

ii. Harakatul-Jihad al-Islami (HuJI)

In addition to providing thousands of fighters for the Afghanistan theatre, HuJI is thought to have supplied the conflict in Kashmir with its greatest number of *mujahidin* "sacrifices."⁵⁹⁰ As it is broadly the case with the TTP, significant conflicts have erupted within HuJI regarding strategic targeting. Rather than the TTP's internecine battles about whether or not to *only* target forces fighting the Afghan Taliban or to also engage Pakistani security forces in Pakistan, HuJI's internal battles have regarded whether or not to *only* operate in Indian-Administered Kashmir, or to also engage in jihad in Afghanistan, Pakistan, and India. Qari Saifullah Akhtar's links to the Afghan Taliban, which came to light after he was forced to flee Afghanistan in 2001,

⁵⁸⁴ Peter Chalk, "The Re-Orienting of Kashmiri Extremism: A Threat to Regional and International Security, *Terrorism Monitor* Vol. 3, Issue 22 (November 17, 2005).

⁵⁸⁵ Peter Chalk correctly observes that, "Moves to limit jihadist attacks have clearly been interpreted by groups such as JeM and HuJI as a sell-out of the Kashmiri cause and confirmation that Islamabad, under the present government, is no more than a puppet of Washington. Certain analysts also believe that the strategy has prompted renegade factions within the armed forces and intelligence services—whose *raison d'être* for most of their existence has been wresting control of [Jammu and Kashmir] from India—to side with and actively support organizations seeking to redirect their ideological fervor against the Pakistani state." Chalk, "The Re-Orienting of Kashmiri Extremism."

⁵⁸⁶ Shuja Nawaz noted in 2010 that when Islamabad "turned its back" on militant groups fighting in Kashmir, it simultaneously lost control of them. "Similar to the disbanding of the Iraqi Army after the US invasion when thousands of trained soldiers and officers were let go," Nawaz observes, "the LeT was cut loose without a comprehensive plan to disarm, retrain, and gainfully employ the fighters." Statement of Shuja Nawaz Director, South Asia Center The Atlantic Council of the United States, Committee on House Foreign Affairs Subcommittee on the Middle East and South Asia, March 11, 2010. Available at: http://www.internationalrelations.house.gov/hearing_notice.asp?id=1163

⁵⁸⁷ Syed, Saleem Shahzad, "The Gathering Strength of Taliban and Tribal Militants in Pakistan," Pakistan Security Research Unit (PRSU), Brief No. 24, November 19, 2007, p. 5.

⁵⁸⁸ Zahid Hussain, *Frontline Pakistan* (New York: Columbia University Press, 2007), p. 56.

⁵⁸⁹ Zahab and Roy, *Islamist Networks*, p. 32.

⁵⁹⁰ Howenstein "The Jihadi Terrain in Pakistan," p. 25.

reportedly eroded the cooperation between Jamait-ul-Mujahidin, wedded to a Kashmir-only strategy and the internationalist HuJI.⁵⁹¹

iii. Harakat ul-Mujahidin (HuM: The Movement of the Mujahidin)⁵⁹²

A member of Osama bin Laden's International Islamic Front (IIF) for Jihad against the Crusaders and the Jewish People,⁵⁹³ HuM supported the Taliban regime in Afghanistan with men, material, and finances. One of its former leaders, Maulana Masood Azhar founded JeM. Not surprisingly, the group has strong bonds with dozens of jihadist groups and has enjoyed unprecedented ties to elements within the ISI and other elements of the Pakistani military in general. In 2000, Maulana Fazlur Rehman stepped down as leader of HuM and was replaced by Forooqi Kashmiri. Banned in late 2001 by the Pakistani government,⁵⁹⁴ some members of HuM reportedly relocated to the Waziristan agencies to join components of the PNT, eventually emerging as members of the TTP. It was part of the 2003 failed assassination attempts against Pakistani President Musharraf.⁵⁹⁵ In addition, it has connections with Lashkar-i-Jhangvi, PNT elements in FATA and in Kyber Pakhtunkhwa, and with Afghan Taliban divisions that are active against US-led coalition forces in Afghanistan.⁵⁹⁶ In 2009, researchers at the S. Rajaratnam School of International Studies (RSIS) reported that "groups like [LeJ] and HuM ... are giving money that they are collecting in Sindh and Punjab provinces to the Pakistan Taliban as gifts ... in return for sanctuary, training, and ideological support."⁵⁹⁷ As part of this activity, HuM reportedly supplies the TTP with a steady and large stream of currency.

b. Indigenous Tribal Fighters⁵⁹⁸

Open sources typically portray elements of what is collectively the TTP as having a qualitatively poor

⁵⁹¹ Ibid.

⁵⁹² In 2003, HuM changed its name to Jamiat ul-Ansar (JuA), however, post-2003 accounts of JuA actions still frequently refer to the group as HuM. Unless otherwise indicated, this report refers to the group as HuM to avoid confusion.

⁵⁹³ See, for example, "International Islamic Front," South Asian Terrorism Portal (SATP) and Raman, "The Punjabi Taliban."

⁵⁹⁴ Some reports have its banning as having occurred in 1999.

⁵⁹⁵ Well publicized attempts were made against the life of then-President Musharraf on December 14 and December 25, 2003. One of HuM's leaders that were active in the plots was the infamous Amjad Hussain Farooqi, "a key suspect in almost every terrorist attack in Pakistan after 9/11." Hussain, *Frontline Pakistan*, p. 68. Musharraf wrote in his autobiography that "[h]e was the planner of the attempts to assassinate me." For Musharraf's account of the assassination attempts see Musharraf, *In the Line of Fire*, pp. 245-263. For quote see p. 225. Farooqi was killed in September 2004. HuJI subsequently established a brigade named the "Amjad Farooqi Group." The group reportedly claimed responsibility for the 2009 siege of the Pakistan Army's General Headquarters (GHQ) in Rawalpindi.

⁵⁹⁶ The "American Taliban" John Walker Lindh was alleged to have been trained at a HuM guerrilla camp. See *United States of America v. John Philip Walker Lindh*, United States District Court for the Eastern District of Virginia, Affidavit in Support of a Criminal Complaint and an Arrest Warrant, June 15, 2002. Available at: <http://www.justice.gov/ag/criminalcomplaint1.htm>.

⁵⁹⁷ A. Acharya et al., "Making Money in the Mayhem," p. 103.

⁵⁹⁸ From October 2003 (the beginning of violent clashes between the Pakistani state and what would become the TTP) until April 2004 (the conclusion of initial hostilities and the signing of the first peace agreement), the primary Pakistani tribe involved in the hostilities was the Ahmedzai Wazir. The Mehsuds and the Ahmedzai Wazirs are South Waziristan agency's two primary tribes—the former is in the majority with 60 percent of the population. The latter controls the border areas between South Waziristan and Afghanistan. Three smaller tribes also inhabit South Waziristan: the Suleman Khel, Dottani, and Urmur (sometimes referred to as the Burkis). South Waziristan's border with Tank (one of the 25 districts of Khyber Pakhtunkhwa) is inhabited by the latter agency's dominant tribe, the Bhattani. The North Waziristan agency is dominated by the Utmanzai Wazirs tribe, a close but contentious relative to the Ahmedzai Wazirs. Sub-clans to these primary tribes number in the hundreds. Regional scholar Akbar S. Ahmed has explained that North and South Waziristan are, "In name and in fact...the land of the Wazirs...Other agencies in the tribal areas, like Malakand, Khyber, and Kurram are named after geographical features." Waziristan's tribal identifications have rarely been explored in depth. However, the works of Akbar S. Ahmed are excellent exceptions. See Akbar S. Ahmed, *Religion and Politics in Muslim Society: Order and Conflict in Pakistan* (Cambridge: Cambridge University Press, 1983), *passim* and esp. pp. 11-35. For an updated version of this seminal study see Akbar S. Ahmed, *Resistance and Control in Pakistan* (New York: Routledge, 2004), esp. pp. 11-97. Quotation is taken from p. 11. For useful maps delineating Waziristan's tribes and sub-tribes see Program for Culture and Conflict Studies, Naval Post Graduate School. 2009. Available at: <http://www.nps.edu/programs/ccs/Docs/Pakistan/Maps/Waziristan.pdf>

education.⁵⁹⁹ Estimates made in 2003 of male literacy rates in Khyber Pakhtunkhwa and in FATA were 51 percent and 30 percent respectively.⁶⁰⁰ Pakistan's male literacy rates as a whole were estimated to be 53 percent.⁶⁰¹ Even with relatively-robust scientific facilities available for students, Pakistan produced only 50 Ph.D.s in 2001.⁶⁰² Although this number increased to 300 annually by 2008, the integrity of the curricula, especially those in the "hard sciences," has been sharply criticized.⁶⁰³

Despite low overall educational standards, some experts have highlighted the relatively-advanced formal educations that some jihadists have; specifically those linked to struggles against Indian control of parts of Kashmir and usually related Punjabi Taliban organizations.⁶⁰⁴ As made clear throughout this profile, this has certainly not been the case with the TTP or TNSM leadership. Those leaders and commanders typically abandoned their *madrassa* studies while still in their teens to pursue violent exploits outside of a formal educational system. In sum, it seems likely that any conceivable RN pursuit by the TTP necessitates the involvement of its educated components from the periphery, for example, the Punjabi Taliban, Al Qaida, and/or former jihadists active in Kashmir.

The TTP is not dependent on the Pakistani military for all of its munitions; it may in fact be able to manufacture its own to some extent. "You bring us a Stinger missile," bragged a merchant to a reporter in 2006, "and we will make you an imitation that would be difficult to tell apart from the original."⁶⁰⁵ Finally, it should be noted that the TTP does not have any evidence of difficulties in obtaining large quantities of military-grade explosives, i.e. the 2008 Marriot Hotel bombing employed 600 kg of an RDX – TNT mix, the 2009 attack on the ISI's Lahore headquarters involved a vehicle-borne improvised explosive device (VBIED) with 125 kg of C4 explosives, and the March 2010 attack on the Federal Investigation Agency's (FIA) Lahore headquarters used 400-500 kg of high explosives. There were reports that some of the more lethal of weapons were unavailable after governmental crackdowns; however, with the growth of the TTP and the concomitant dissolution of legitimate authority in the region, that is likely no longer the case.

c. Pakistani based/originating members

i. Tehrik-e-Taliban Punjab (TTP, Movement of the Punjabi Taliban)

Since 2007, observers have increasingly pointed toward terrorist attacks attributed to the "Punjabi Taliban" network as evidence that violent Talibanization efforts in Pakistan are now countrywide.⁶⁰⁶ Other commentators reverse this implicit perception of cause and effect by asserting that the Punjabi Taliban is the enabler of core PNT groups, e.g., the TTP. They provide the latter with "weapons, recruits, finances and other resources," allowing them to expand their influence throughout Pakistan.⁶⁰⁷ According to the International Crisis Group (ICG), the rise of extremism in Pakistan "is not an outgrowth or 'carryover' of the

⁵⁹⁹ See for example, C. Christine Fair, "Who Are Pakistan's Militants and Their Families?" *Terrorism and Political Violence* Vol. 20, No. 1, (January 2008), pp. 49-52.

⁶⁰⁰ Nawaz, FATA – A Most Dangerous Place, p. 8.

⁶⁰¹ Out of 177 countries analyzed by the United Nations in 2009, only 17 had lower national literacy rates [based on both genders]. "Overcoming Barriers, Human Mobility and Development," *Human Development Report 2009* United Nations Development Programme (UNDP) (2009), pp. 170-175. Available at:

http://hdr.undp.org/en/media/HDR_2009_EN_Complete.pdf

⁶⁰² Rashid, *Descent into Chaos*, p. 235.

⁶⁰³ A. A. Khan, "Pakistan Planning Body Slams Science PhD 'Mills,'" The Science and Development Network (SciDev), July 31, 2009. Available at: http://www.scidev.net/en/science-and-innovation-policy/governance/pakistan-planning-body-slams-science-phd-mills-1.html?utm_source=link&utm_medium=rss&utm_campaign=en_scienceandinnovationpolicy_governance

⁶⁰⁴ Fair, "Who Are Pakistan's Militants and Their Families?"

⁶⁰⁵ Ibid.

⁶⁰⁶ Aamer Ahmed Khan, "Pakistan's Flourishing Arms Bazaar," BBC News Peshawar, June 21, 2006. Available at: http://news.bbc.co.uk/2/hi/south_asia/5066860.stm

⁶⁰⁷ Hassan Abbas, "Defining the Punjabi Taliban Network" *CTC Sentinel* Vol. 2, Issue 4 (April 2009), p. 1. References to a "Punjab Taliban" go back at least as far as May 2002. See Khaled Ahmed, "The Biggest Militia We Know Nothing About," *The Friday Times*, May 20, 2002. Available at: <http://www.hvk.org/articles/0502/161.html>

⁶⁰⁸ "Pakistan: The Militant Jihadi Challenge," p. i.

Pakistani Taliban.” Rather, “violent Deobandi networks in Punjab lie at the root of Pakistan’s militancy problem.”⁶⁰⁸ Regardless of origin, concerns today revolve around the degree to which the Punjabi Taliban, FATA, and Khyber Pakhtunkhwa Taliban groups (e.g., the TTP) have adopted similar agendas. In that regard, some observers posit “the TTP and Punjabi militants are part of the same front and have one mission.”⁶⁰⁹

Although the major groups in the Punjabi Taliban network—LeJ, SSP, and JeM—are typically associated with sectarian violence and, in some cases, the struggle for control of Kashmir, they increasingly reflect the growing trend in domestic Pakistani terrorism away from the targeting of religious marches, mosques, and Shi’ite leaders, to what has been called “increasingly bold strikes against the symbols of the state.”⁶¹⁰ Several of these groups benefitted from high-level state military training and combat experience because Pakistan sought to use them to challenge India in the contested sections of Kashmir in the 1990s.⁶¹¹ Consequently, many of these groups are highly proficient in sabotage, guerilla tactics, and asymmetrical warfare in general.⁶¹² Furthermore, many of these groups’ members were part of the *madrassa* system, yet in contrast to their Pashtun counterparts, “the Punjabi Taliban is comparatively more educated, better equipped and technologically savvy.”⁶¹³ Finally, Abbas notes that Punjabi Taliban operatives typically tend to have criminal backgrounds and while fully accepting their own death as part of an operation, they endeavor to fight until killed by an opponent as opposed to a strict suicide attack.⁶¹⁴

Although the Punjabi Taliban is often a blanket term used to describe several Punjab-based jihadi organizations,⁶¹⁵ at its core are three groups.

ii. Lashkar-e-Jhangvi (LeJ)

Like the TTP writ large and Al Qaida, LeJ has been connected to the September 2008 bombing of the Marriott Hotel in Islamabad.⁶¹⁶ There are also reports that significant elements of LeJ are now located in FATA’s Orakzai agency where, according to one report, they serve as “the muscle” for larger terrorist attacks.⁶¹⁷ In short, LeJ has planned and, at times, assisted in the execution of attacks attributed to FATA-based TTP groups.⁶¹⁸ Although all of the Punjabi Taliban engages in sectarian violence to some extent, LeJ is the most violently anti-Shi’ite group active in the world. LeJ’s apparent proclivity for metropolitan fixed

⁶⁰⁸ In Punjab as a whole the Deobandi sect does not have predominance. The largest Sunni following belongs to the Barelvi movement, which is close to Sufism. “The State Of Sectarianism in Pakistan,” p. 14.

⁶⁰⁹ Nasir Jamal, “South Punjab sees Taliban Connection as Stigma – II,” *Dawn*, May 25, 2009. Available at: <http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/the-newspaper/front-page/south-punjab-sees-taliban-connection-as-stigma-ii-559>

⁶¹⁰ Abbas, “Defining the Punjabi Taliban Network,” p. 3. This is not meant to assert that terrorist attacks against sectarian targets have necessarily decreased in Pakistan. While this may be the case, it is far more likely that sectarian terrorist attacks have *risen* (just as has been the case with all major types of terrorist targets in Pakistan as a whole). However, sectarian attacks have risen *at a slower proportional pace* than other non-secular targets—for example, symbols of the Pakistani state. The author bases these assertions on trends emerging in the GTD and WITS.

⁶¹¹ Ibid, p.13

⁶¹² Ibid.

⁶¹³ Ibid, p. 3. Ahmed Rashid has noted that some of these former Kashmiri fighters, after having made links with the Pakistani Taliban, “were able to mount suicide attacks in Pakistani cities where the Taliban themselves had little access.” Ahmed Rashid, “Pakistan on the Brink,” *The New York Review of Books* Vol. 56, No. 10 (June 11, 2009). Available at: <http://www.nybooks.com/articles/22730>

⁶¹⁴ Ibid.

⁶¹⁵ For “blanket term” use of Punjabi Taliban see “Amir Mir, Punjabi Taliban Found Involved in Pak Terror Spree,” *Middle East Transparent*, October 16, 2009. Available at: http://www.mettransparent.com/spip.php?page=article&id_article=8438&lang=en

⁶¹⁶ Bill Roggio, “Al Qaeda-linked suspects emerge in Islamabad Marriott attacks,” *The Long War Journal* (September 25, 2008). Available at: http://www.longwarjournal.org/archives/2008/09/al_qaeda-linked_suspects_emerge_in_islamabad_marriott_attacks.php See also Williams, “Talibanistan,” p. 51.

⁶¹⁷ Roggio, “Pakistani Military Hits Taliban in Arazkai,”

⁶¹⁸ “Pakistan: The Militant Jihadi Challenge,” p. i.

targets is in harmony with its reputation as a master of logistics and the types of complicated attack planning inherent in most urban operations.⁶¹⁹ LeJ has learned its skills from the best. The group was one of the first to move many of its members to Afghanistan during the Taliban era of 1996–2001.⁶²⁰ There, they received specialized training amid a network of highly skilled jihadists, most notably Al Qaida. Following the exodus of jihadists from Afghanistan in 2001–2002, LeJ was able to reverse host roles by assisting the Taliban and Al Qaida in resettling some of their forces in the Punjab. The International Crisis Group has described LeJ's present role as "the lynchpin of the alignment between Al Qaida, the Pakistani Taliban and sectarian groups."⁶²¹

iii. Sipah-e-Sahaba

Like LeJ, which arose from the SSP, the group is most closely associated with anti-Iran and anti-Shi'ite activities.⁶²² Given its Deobandi underpinnings and anti-Iranian program, it is not surprising that the SSP has strong links to the ISI, most notably with the Zia regime and the second government of Benazir Bhutto (1993–1996).⁶²³ SSP recruited thousands of its members from *madrassas* run by the JUI-F⁶²⁴ and subsequently sent them to fight with the Taliban in Afghanistan from the mid-1990s until late 2001.⁶²⁵ Throughout the 1990s, the SSP was responsible for complex and lethal attacks against Iranian interests, namely the killing of Iranian diplomats, cultural attachés, and air force cadets. The group was banned in 2002 but simply reemerged under a different name.⁶²⁶ Since then it has conducted complex and deadly attacks against Shi'ite civilians, operating at times with the TTP. The International Crisis Group has estimated that some "5,000 to 6,000 SSP activists have undergone jihadi training."⁶²⁷

iv. Jaysh-e-Muhammed (JeM)

Founded in 2000, JeM is led by Maulana Masood Azhar, whose links to the ISI, the Taliban, HuM, and Al Qaida go back to at least the mid-1990s.⁶²⁸ Although JeM is nominally wedded to the struggle in Kashmir, its post-9/11 enmity toward the Pakistani government led to attacks against state targets, including the December 2003 plot to assassinate then-President Musharraf. JeM was a key player in the 2007 Lal Masjid incident⁶²⁹ and it subsequently joined forces with elements of the TTP to strike against Shi'ite targets.⁶³⁰

⁶¹⁹ "Given their knowledge about Punjabi cities and security structure, [LeJ has proven] to be valuable partners for the TTP as it targets cities in Punjab, such as Lahore, Rawalpindi and Islamabad." Abbas, "Defining the Punjabi Taliban Network," p. 2.

⁶²⁰ LeJ and SSP relocated to Afghanistan when Pakistan's civilian government of Nawaz Sharif's Muslim League (PMLN), took significant steps against Deobandi militant groups during Sharif's second term (February 1997 to October 1999). "The State Of Sectarianism in Pakistan," *passim*.

⁶²¹ "Pakistan: The Militant Jihadi Challenge," p. 6.

⁶²² Pakistan, it should be recalled, has the world's second largest Shi'ite population; Iran has the largest.

⁶²³ Abou Zahab, , Mariam "The SSP: Herald of Militant Sunni Islam in Pakistan," in Laurent Gayer and Christophe Jaffrelot Eds., *Armed Militias of South Asia: Fundamentalists, Maoists and Separatists* (Columbia University Press, 2009). pp. 171–172.

⁶²⁴ Magnus Norell, "The Taliban and the Muttahida Majlis-e-Amal (MMA)," p. 73.

⁶²⁵ "The State Of Sectarianism in Pakistan," p. 13.

⁶²⁶ The new name was Milat-e-Islamia Pakistan (MIP). The group is still commonly referred to as SSP.

⁶²⁷ Ibid, p. 14.

⁶²⁸ Hussain, *Frontline Pakistan*, pp. 64–67.

⁶²⁹ "Half-way through the Lal Masjid siege, on 8 July 2007 it was reported that members of the outlawed radical organization, Jaish-e-Mohammad (JeM) were in actual control of the Red Mosque." Siddique, "The Red Mosque Operation and its Impact on the Growth of the Pakistani Taliban," p. 38.

⁶³⁰ With regard to JeM's ties to the TTP, scholar Qadeel Siddique has written that "[i]t is therefore not too farfetched to speculate that—based on the sharing of ideology and evidence of JeM presence in Swat—the two organizations are working towards the same goal and hence, most likely pooling resources." Siddique adds that "[t]he interface between JeM and militants of the tribal areas appears to be a relatively recent development. Hitherto JeM's agenda has revolved around the 'jihad' in Kashmir and Afghanistan, but having joined forces with the Pak-Taliban to fight the Pakistani military (in the case of Swat, for example), indicates a broadening of its activities. This development seems to have taken place after July 2007, further implicating the role of the Lal Masjid operation in pushing for a union of different extremist groups in Pakistan. Considering the bonds between the administration of Lal Masjid and its madrassas, and JeM, it could be reasoned that the group sought to seek revenge against the Pakistani [security forces] for [the raid on

Reportedly, JeM was also well represented during the First Battle of Swat.⁶³¹ More recently, it is believed that JeM is focusing on actions in Afghanistan. Yet, the group is still active in Pakistan, i.e. likely spearheading the attack on the Sri Lankan cricket team in March 2009.

d. Al Qaida: Adaptation/Diffusion of Basic Afghan Taliban and Al Qaida Tactics

Since 2002, the Afghan Taliban has been using Waziristan for recruitment and training. Up until 2004, however, their efforts were almost entirely aimed at retaking Afghanistan with no desire to engage the Pakistani military.⁶³² Also focused on the fight in Afghanistan was Al Qaida, whose leaders assisted their Afghan Taliban colleagues by training new recruits. Still reeling from the temporary defeat in Afghanistan, Al Qaida initially offered only basic training: new recruits were taught how to conduct ambushes and to be proficient with AK47s, grenades, and basic explosives.⁶³³ Increasingly, however, Al Qaida's leadership began to see a confrontation with the Pakistani state as essential. According to a knowledgeable Pakistani source, Al Qaida ideologue Sheikh Essa was "convinced that unless Pakistan became the Taliban's (and Al Qaida's) strategic depth, the war in Afghanistan could not be won."⁶³⁴ Thus, Al Qaida increasingly sought to transform the local tribal youth they trained from Taliban sympathizers to jihadists with a regional, if not global, agenda.

e. Foreign (non Al Qaida) Jihadists

i. The Islamic Movement of Uzbekistan (IMU)

Together with the Taliban and Al Qaida, the IMU fled Afghanistan in late 2001,⁶³⁵ relocating to Pakistan's tribal areas where they were joined by other foreign jihadists, for example Chechens and Uighur Muslims from eastern China.⁶³⁶ In time, the group became known for their savage and effective fighting skill against civilian and military targets in Pakistan. Above all else, they were renowned for their deep loyalty to bin Laden, morphing into what Imtiaz Gul has termed "a lethal non-Arab Al Qaida entity."⁶³⁷ While generally supported by the Mehsud factions, the group has been violently opposed by elements of the TTP aligned with Maulavi Nazir.⁶³⁸ The group was further weakened by the loss of its Amir, Tahir Yuldashev,

Lal Masjid], and in this pursuit joined the Pak-Taliban (with whom it now shares a common enemy)." Ibid, p. 38 and p. 50.

⁶³¹ Ibid, p. 38.

⁶³² Recruitment for the Afghan jihad was largely being led by Mullah Dadullah and Jalauddin Haqqani.

⁶³³ Syed, Saleem Shahzad, "The Gathering Strength of Taliban and Tribal Militants in Pakistan," Pakistan Security Research Unit (PRSU), Brief No. 24, November 19, 2007, pp. 3-4.

⁶³⁴ Syed Saleem Shahzad, "Interview Aims at Pakistan's Heart," *Asia Times Online*, January 1, 2008. Available at: http://www.atimes.com/atimes/South_Asia/JA01Df01.html

⁶³⁵ In another example of the ISI aiding the Afghan Taliban, al-Qa'ida and their allies, reports indicate that in November, 2001 the ISI airlifted thousands of IMU fighters trapped in Kunduz, Afghanistan, to safety in Pakistan. Dexter Filkins and Carlotta Gall, "Pakistanis again Said to Evacuate Allies of Taliban," *The New York Times*, November 23, 2001; Barnett R. Rubin, "Saving Afghanistan," *Foreign Affairs*, January/February 2007, p. 63; and Rashid, *Descent into Chaos*, pp. 92 and 164.

⁶³⁶ Ibid, *passim*. Some reports have the IMU headquartered just to the west of Waziristan, in Afghanistan's eastern Paktika province (an area with strong ties to the Mehsud tribe). See Imtiaz Gul, "The Waziristan Wild Card," *Foreign Policy*, October 1, 2009. Available at: http://afpak.foreignpolicy.com/posts/2009/10/01/the_waziristan_wild_card

⁶³⁷ Ibid.

⁶³⁸ In just three days in March 2007, Nazir's militiamen reportedly killed over 80 IMU fighters in fierce combat that utilized heavy weapons, rockets and mortars. Total IMU losses at the hands of Nazir's forces have been estimated at 200. These numbers are significant: when the IMU finally escaped US forces in Afghanistan in 2001, their numbers were estimated to be from 600 to 1,000. Ismail Khan "100 Dead in Militant Clashes in Pakistan," *The New York Times*, March 21, 2007. For total losses see Abbas, "South Waziristan's Maulvi Nazir: The New Face of the Taliban." For an estimate of the IMU's strength in 2002, see Williams, "Talibanistan: History of a Transnational Terrorist Sanctuary," p. 45. See also, Iqbal Khattak, "Wazir Tribes Ratify New Militant Bloc," *Daily Times* (Lahore), July 8, 2008. Available at: http://www.dailytimes.com.pk/default.asp?page=2008\07\08\story_8-7-2008_pg7_1

in a US airstrike in South Waziristan on August 27, 2009.⁶³⁹ Presently believed to be led by Usman Jan, the IMU reportedly has strong links to the Haqqani network.⁶⁴⁰

ii. The Islamic Jihad Union (IJU)

With its leaders reportedly enjoying close relations with bin Laden prior to his death, and Mullah Omar,⁶⁴¹ the IJU's Pakistani sanctuaries are primarily in FATA's Bajaur and Waziristan agencies.⁶⁴² In addition to using Pakistan's tribal areas as a command center for launching well-coordinated and deadly attacks in Uzbekistan,⁶⁴³ the group has plotted and carried out several attacks against Pakistani leaders and security forces throughout northwestern Pakistan.⁶⁴⁴ In December 2007, they joined with the other TTP factions in battling Pakistan's military forces during the First Battle of Swat.⁶⁴⁵ Like the IMU, the group is thought to excel at the paramilitary training of TTP's cadres.⁶⁴⁶ According to the US State Department, the IJU was the first terrorist group to employ female suicide bombers in Central Asia.⁶⁴⁷ The group reportedly has "strong linkages" with the Haqqani network.⁶⁴⁸

The IJU reportedly has cells outside of Central and South Asia, including Turkey and Europe. Most notable of these cells was the one in Germany that was partially apprehended prior to an attack on the US military base at Ramstein, i.e. the IJU cell had successfully acquired "700 kilos of chemicals capable of being converted into explosives".⁶⁴⁹ This 2007 plot allegedly also involved the targeting of NATO offices in Germany and Turkey.⁶⁵⁰

f. Afghan Taliban

While in some ways the goals of both parties appear similar, there is a clear emphasis by the latter on the Afghan theatre. If taken as fact, the Taliban's spokesman has summarized the Afghan Taliban's view of the TTP by noting that "the conflicts in Pakistan and Afghanistan are different...the Pakistani Taliban are fighting

⁶³⁹ Some sources contend that Yuldashev is still alive. See, Cerwyn Moore, "The Rise and Fall of the Islamic Jihad Union: What Next for Uzbek Terror Networks," *Terrorism Monitor* Vol. 8, Issue, 14 (April 9, 2010). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=36251&tx_ttnews\[backPid\]=7&cHash=f35b38a80f](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36251&tx_ttnews[backPid]=7&cHash=f35b38a80f)

⁶⁴⁰ See, for example, Dan Witter "Uzbek Militancy in Pakistan's Tribal Region," Institute for the Study of War, *Backgrounder*, January 27, 2011, p. 8 and passim.

⁶⁴¹ "US Department of State Designates the Islamic Jihad Group Under Executive Order 13224," Press Statement, US Department of State. May 26, 2005. Available at: <http://2001-2009.state.gov/r/pa/prs/ps/2005/46838.htm>
Mukhtar A. Khan, "Bajaur Agency: The New Landscape of Insurgency in FATA," *Terrorism Monitor* Vol. 8, Issue, 6 (February 12, 2010). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=36037](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36037)

⁶⁴³ From March 29, 2004 to July 30, 2004, the IJU undertook a campaign of terrorist attacks (often suicide) against state and foreign targets in Tashkent. In at least nine incidents the IJU killed 20 and injured another 63 police officers and civilians. Two of these incidents targeted the US and Israeli embassies. For these two attacks see GTD (ID numbers 200407300002 and 200407300001 respectively). For the other seven incidents see WITS (ICN numbers: 200458344, 200458911, 200458345, 200464115, 200458913 and 200459604). Available at:

<https://wits.nctc.gov/FederalDiscoverWITS/index.do?N=0>

⁶⁴⁴ Ronald Sandee, "The Islamic Jihad Union (IJU)" The NEFA Foundation, October 14, 2008, pp. 14-15. Available at: <http://www.nefafoundation.org/miscellaneous/FeaturedDocs/nefaijuoct08.pdf> The IJU also has one confirmed attack against US forces in Khost, Afghanistan—a suicide vehicle-borne improvised explosive device (VBIED) in March 2008 that killed two US soldiers and wounded 1 others. See WITS, ICN number 200807293. Available at:

<https://wits.nctc.gov/FederalDiscoverWITS/index.do?N=0>

⁶⁴⁵ Ibid, p. 15

⁶⁴⁶ B. Raman, "Uzbeks to the Fore," *International Terrorism Monitor*, Paper No. 273. South Asia Analysis Group (September 6, 2007).

⁶⁴⁷ "US Department of State Designates the Islamic Jihad Group Under Executive Order 13224," Press Statement, US Department of State. May 26, 2005. Available at: <http://2001-2009.state.gov/r/pa/prs/ps/2005/46838.htm>

⁶⁴⁸ Witter "Uzbek Militancy in Pakistan's Tribal Region," p. 36.

⁶⁴⁹ B. Raman, "Uzbeks to the Fore." For more on the plot see and a general background on IJU, see Moore, "Uzbek Terror Network: Germany, Jamoat, and the IJU."

⁶⁵⁰ Moore, "The Rise and Fall of the Islamic Jihad Union: What Next for Uzbek Terror Networks."

the government to receive their rights, but in Afghanistan it is a holy war and the aim is to free Afghanistan from the Americans and other 'heathens.'"⁶⁵¹

The Afghan Taliban supplies personnel because of its strong Deobandi and Pashtun tribal links. Yet, it has enormous friction due to Afghan-centered vs. Pakistan-centered priorities. Seeking to maintain a common front in Afghanistan, Taliban supreme leader Mullah Omar has endeavored to keep the TTP's unity intact. For example, the conflict between Baitullah Mehsud and Bahadar-Maulavi Nazir, was resolved by a delegation from Mullah Omar during negotiations from December 2008 to January 2009.⁶⁵² Prior to these negotiations, the TTP had split into two governing factions. However, with Mullah Omar's intervention the TTP's primary rivals reportedly overcame their differences and established a new alliance, i.e. the Shura Ittihad-ul-Mujahidin (Council for United Holy Warriors).⁶⁵³ The primary outcome of this arrangement, in Mullah Omar's view, was its commitment to focusing resources on the Afghan war theater.

II. Factor Analysis

A. The Leadership's Tolerance for Uncertainty

1. Arguments for High Tolerance:

Based on evidence from open sources, the TTP has high tolerance for uncertainty only when the operation in question is not strategically important to the group. Such operations are usually carried out to keep members occupied or distract intelligence forces, for example bombing markets. However, for tasks that are strategically important for the group, the TTP exhibits a much lower tolerance for uncertainty.

2. Arguments for Medium Tolerance:

There are some indications illustrating that TTP leaders have tolerated a medium degree of uncertainty in their operations. One example is the bombing of the CIA forwarding base in Khost Province, Afghanistan in December 30, 2009. In this case, leaders were not certain about the guaranteed success of the operation. Despite this uncertainty, the operation was carried out and it succeeded. Al-Balawi's (the operator of the attack) killed the base's Afghan security director and seven CIA employees (including its highly esteemed station chief)—the largest single loss-of-life incident for the CIA since Hezbollah's 1983 Beirut bombing of the US Marine Barracks.⁶⁵⁴ Joby Warrick explained that the TTP "would never [have] suspected that al-Balawi would have gotten as far as he got. The assumption was that he would kill some guards."⁶⁵⁵

Another example occurred when the terrorists who had taken control of the security wing in the GHQ decreased their demands to reflect the increased pressure being applied by the Pakistani military. Sources said that they demanded the release of 150 dangerous terrorists detained by the security agencies, and the number continued to decrease at different intervals throughout the day. Before the commandos began a counteroperation, the terrorists had withdrawn the demand for the release of their 150 companions, and had started demanding safe passage.

3. Arguments for Low Tolerance:

Nearly all evidence indicates that the TTP leadership has low tolerance for uncertainty in terms of their

⁶⁵¹ Wahidullah Mohammad, "Reaction of the Afghan Taliban to the Pakistani Government's Offensive in Swat," The Jamestown Foundation, June 18, 2009. Available at:

[http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=35146](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=35146)

⁶⁵² Moore, "The Rise and Fall of the Islamic Jihad Union: What Next for Uzbek Terror Networks."

⁶⁵³ Haji Mujtaba Khan, "Taliban Rename Their Group," *The Nation* (Islamabad), February 23, 2009. See also Sadia Sulaiman and Syed Adnan Ali Shah Bukhari, "Hafiz Gul Bahadur: A Profile of the Leader of the North Waziristan Taliban," *Terrorism Monitor* Vol. VII, Issue 9 (April 10, 2009), p. 6.

⁶⁵⁴ Kim Sengupta, "Suicide Attack Inflicts Worst Death Toll on CIA in 25 Years," *The Independent*, January 1, 2010. Available at: <http://www.independent.co.uk/news/world/asia/suicide-attack-inflicts-worst-death-toll-on-cia-in-25-years-1854762.html>

⁶⁵⁵ Charles P. Blair's interview with Joby Warrick, October 2, 2011

overarching strategic missions. Evidence illustrates that “Meetings are announced only at the last minute, with nothing planned in advance in order to avoid leaks. Even senior commanders do not know the precise location of regional commanders.”⁶⁵⁶ These are indicators of low tolerance for uncertainty among the TTP leaders.

4. Final Estimation:

Taken as a whole, the TTP’s level of tolerance for risk and uncertainty is likely to be low for their strategic operations. The group is clearly under siege by US drones. Thus, it deeply needs to maintain its prestige and the group’s perception in public. As a result the leaders’ tolerance for uncertainty has decreased. In addition, the TTP has undergone factionalization, generating a high degree of competition between subgroups. This competition and the threat of diminished esteem from failure, mostly encourages a low tolerance among leaders for risk and uncertainty.

5. How this factor might change in the next five years.

Any decrease in the US and Pakistani pressure on the group, including fewer US drone strikes, might motivate TTP leadership to accept higher degrees of risk and uncertainty, and boost their number of attacks.

B. The Leadership’s Definition of “Success”

1. Arguments for Success Entailing a Specific Outcome:

None.

2. Arguments for Success Allowing for a Suboptimal Outcome in Target and/or Timing:

One example, as mentioned earlier in this report, is the terrorists who had assaulted Pakistan Army’s general headquarter (GHQ) in Rawalpindi. As the situation unfolded, the TTP forces in the GHQ began to change their objectives as the situation evolved. Another example is Humam al-Balawi’s case. He successfully assaulted the CIA base in Khost, Afghanistan. In this case, the TTP leader’s primary definition of success was broad, undefined, and open. The TTP had a minimal expectation from this attack. However, this attack turned out to be a huge success.

3. Arguments for Success Allowing for a Suboptimal Outcome Resulting in a “Fizzler” Yield:

There is little open source evidence to suggest the TTP tolerates suboptimal outcomes, or ones that would result in a fizzle yield. The group persistently strives to reach its strategic goals, and, if their first attempt fails, they will continue to carry out the mission until they succeed. A good example is Benazir Bhutto’s assassination. Although, for the first time in October 2007 their operation failed, the TTP was able to successfully accomplish its mission in May 2008.

4. Final Estimation:

Given the evidence in open sources, the definition of success for the TTP leader perception is suboptimal outcome: target and/or timing. This type of outcome would satisfy the TTP’s strategic vision, which is to send a clear message to Washington to stop the drone attacks and to pull its forces out of Afghanistan. Moreover, TTP’s other goals are a cessation of US support for the Pakistani government, as well as a cessation of US support for the Indian government.

The apocalyptic eschatology aspects of its ideology lead to a belief that given their participation in the war for the end times, even a suboptimal yield can be counted as a success, even if the initial target is no longer viable.

As Jeffrey M. Bale explains, some “apocalyptic believers will actually be motivated or driven to carry out acts of brutal violence, since their main goal is to eliminate “evil-doers,” whether they are non-believers,

⁶⁵⁶ See, “Pakistani Taliban Commander Describes Counter-Measures Against UAV Attacks,” *Terrorism Monitor* Vol. 7 No 31 (October 23, 2009). Available at: http://www.jamestown.org/uploads/media/TM_007_d28e62.pdf. The interview with Sahimullah Mahsud was originally from a Belgian newspaper, *Le Sior*, dated October 12, 2009.

“apostates,” or simply less committed believers, who are thought to embody sinfulness and corruption and/or are believed to be the human agents of demonic supernatural forces.”⁶⁵⁷

5. How this factor might change in the next five years.

The definition of success depends to a large extent on the TTP's perception of their security. If the Pakistani government collapses, the leaders will likely enjoy the benefits of new circumstances and would create new definitions for success. In the case of the Pakistani government falling, expectations for success will be high, which could lead to more sophisticated operations not only in Pakistan and Afghanistan but also in other countries. However, if the Pakistani government and the US forces continue their siege of the TTP, then their definition of success will minimize. In the latter case, the group's survival and maintenance could be a sufficient definition of success.

C. The Importance to the Leadership of Flexibility in the Field

1. Arguments for High Importance:

With regard to “terror” vs. “destruction” one can argue that the TTP seeks “to create a sense of insecurity all over Pakistan.”⁶⁵⁸ In reality since the group's leadership is highly factionalized, as discussed earlier, each leader's flexibility is limited to certain areas. All the various TTP subgroups in FATA, as well as those in Kyber Pakhtunkhwa, are believed to operate independently to the degree that, according to one group of researchers writing in late 2008, “Taliban militants of one tribe do not operate on the territory of the other tribe, which is the exclusive domain of that tribe only.”⁶⁵⁹

2. Arguments for Medium Importance:

There is some evidence indicating that when different factions of the TTP are involved in a single operation, there is a desire for more flexibility. For instance in both attacks on Benazir Bhutto,⁶⁶⁰ and the bombing of the CIA base in Khost,⁶⁶¹ the flexibility in the field was moderately important to leadership. Another example is the cooperation of the TTP and Al Qaida and potential flexibility within their territories. Joby Warrick explains the attack on the CIA base in Khost as a “shared” operation among Al Qaida and the TTP, “In this case the TTP was in possession of the particular agent (al-Balawi). However, it became clear that Al Qaida could do something more elaborate. The TTP leaders are very independent minded, have their own agenda, they collaborate with Al Qaida when it serves importance purposes.”⁶⁶² With the TTP's main faction (BM) they are willing to cooperate with Al Qaida and give up some flexibility in the field.

3. Arguments for Low Importance:

There is no evidence to suggest that in any significant mission conducted by the TTP that flexibility in the field has not been important to the leadership.

4. Final Estimation:

As mentioned earlier, as an umbrella organization, the leadership may set goals and objectives but the organizations below it have a certain degree of autonomy in their own provinces. It would appear that these organizations may solicit the umbrella organization for assistance when they need it and on those occasions

⁶⁵⁷ See Jeffrey M. Bale, *Apocalyptic Millenarian Group Radiological and Nuclear Terrorism Threat Assessment*, 2011. p. 11.

⁶⁵⁸ Imtiaz Gul, *The Most Dangerous Place* (New York: Viking, 2009), p. 136.

⁶⁵⁹ A. Acharya et al, “Making Money in the Mayhem,” p. 97.

⁶⁶⁰ See Charles P. Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban* (Washington, DC: The Federation of American Scientists, 2011), pp. 134 & 137.

⁶⁶¹ See Charles P. Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban* (Washington, DC: The Federation of American Scientists, 2011), p. 147.

⁶⁶² Charles P. Blair's interview with Joby Warrick, October 2, 2011.

when one group's mission is in conflict with those of another group under the TTP's general control. Although in-depth information for how these groups interact underneath the main organization is lacking,⁶⁶³ several reports indicate ongoing power struggles among leaders and killings between rival factions. Obviously, flexibility is limited when operating in another faction's territory. Yet, TTP may still place importance on flexibility, even when they cannot achieve it in practice. Thus, flexibility in the field has high importance for the leaders only to the extent that they control that particular geographical area. When taken as a whole, flexibility in the field is of medium importance to the TTP.

5. How this factor might change in the next five years.

Theoretically, any factor that unifies the TTP as a whole would change the importance of flexibility for the leaders. If the group was able to operate in any area, there would be no need to respect the authority of a local leader. One factor that can unify the TTP is a serious security threat by the US and/or Pakistani government. If TTP faces its existential demise, there is a chance for unification.

D. The Leadership's Perception(s) of Previous Command and Control Outcomes

There is insufficient open source information to illustrate how the TTP leadership perceives the command and control in the group. However, pre-determined, assertive, and delegative approaches in C&C will be discussed separately.

1. Previous Experience With Predetermined Command and Control:

The only open source evidence of a significant operation which was entirely pre-determined in C&C is the bombing of the CIA base in Khost province, on 30 December 2009.⁶⁶⁴ The case has been already discussed earlier in this report.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Failure:

None.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Success:

None.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in an Indeterminate Outcome:

Due to lack of open source information, this question cannot be addressed.

2. Previous Experience with Assertive Command and Control:

Yes.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Failure:

None.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Success:

Several attacks could be interpreted as assertive in their leadership command and control. Examples include but are not limited to the Peshawar Pearl Continental Hotel bombing on June 9, 2009; the attack on

⁶⁶³ Simon Valentine, "The Tehrik-i-Taliban Pakistan: Ideology and Beliefs," Pakistan Security Research Unit // Department of Peace Studies, University of Bradford, (15 December 2010). Available at: <http://www.humansecuritygateway.com/showRecord.php?RecordId=30636>

⁶⁶⁴ See Charles P. Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban* (Washington, DC: The Federation of American Scientists, 2011), p. 147. The operation was predetermined in the sense that Balawi was given instructions, explosives, and the direction to detonate himself at the best time possible (as detailed by his handlers). AQCL did not think he would be able to proceed as far into the compound as he did. Nonetheless, the target was predetermined as being "the point where the bomber could kill as many inside the compound as possible before being discovered." He detonated his explosives as precisely the right time to conform to what he perceived as his instructions.

ISI provisional headquarters on May 27, 2009; and the Marriott hotel bombing on September 20, 2008.⁶⁶⁵ Thus, assertive C&C is probably perceived as being generally successful by the leadership.

Arguments for Leadership Perceptions that Assertive C&C Resulted in an Indeterminate Outcome:

None.

3. Previous Experience with Delegative Command and Control:

Yes.

Arguments for Leadership Perceptions that Delegative C&C Resulted in Failure:

None.

Arguments for Leadership Perceptions that Delegative C&C Resulted in Success:

In general, it is indeterminate how the TTP views the outcomes of previous C2 delegative configurations. However, there is some evidence that demonstrates that a delegative approach was taken during the important missions. Those missions have succeeded. One example is assault of Pakistani army's general headquarters (GHQ) in Rawalpindi on October 10, 2009.⁶⁶⁶

Arguments for Leadership Perceptions that Delegative C&C Resulted in an Indeterminate Outcome:

Based on all assessed data, it is indeterminate how the TTP views the outcomes of previous C2 delegative configurations.

4. Leadership Perception of Outcomes Based on Command and Control Arrangement Type

Predetermined Final Estimation:

Due to lack of open source information, this is indeterminate. The Khost attack provides the only information on a pre-determined attack and this case is not fully understood.

Assertive Final Estimation:

As mentioned above, there is some evidence that indicates the leadership perceives assertive C&C arrangements will succeed.

Delegative Final Estimation:

Due to lack of open source information, this is indeterminate. The 2010 GHQ attack provides the only delegative example and all of the information for this case is not known.

5. How this factor might change in the next five years.

If the TTP's factions successfully carry out some major operations, there is a chance that TTP's current assertive approach would move closer to a delegative command structure. In other words, any modification in command and control depends on the success of the TTP's future operations.

E. The Leadership's Perception: Complexity of Getting a Working Weapon to the Target (U.S.)

1. Arguments for Perception of High Complexity:

As mentioned earlier in this profile, the TTP is a factionalized group and all subgroups are believed to operate independently. However, various factions do cooperate: collecting and distributing revenue and coordinating combat and supply lines. The fissiparous nature of the TTP's leadership is the critical difference separating it from the Afghan Taliban. Nevertheless, being factionalized adds to the complexity of getting a weapon to a target. Moreover, US drones have played a significant role. The TTP perceives that it is being watched by the US constantly, which enhances the leaders' perception of complexity in getting a

⁶⁶⁵ See Charles P. Blair, *Anatomizing Non-State Threats to Pakistan's Nuclear Infrastructure: The Pakistani Neo-Taliban* (Washington, DC: The Federation of American Scientists, 2011), pp. 142 & 144 & 145.

⁶⁶⁶ It would appear that during the siege, Mohammed Aqeel (the operator) was solely in command of other nine commandos and did not have communications with any of his three parent organizations: Tehrik-e-Taliban, Harkat-ul-Jihad-al-Islami, or Lashkar-e-Jhangvi. (According to Policy Research group)

working weapon to a target in the region, let alone one in the United States. TTP has some assets in the US, but none are well trained.

2. Arguments for Perception of Medium Complexity:

In case of cooperation between different factions of the TTP, it would not be difficult for the group to move across the FATA region and into Afghanistan, and theoretically even into other areas of Pakistan. TTP faction leaders view cooperative efforts as moderately complex. There are also reports that the TTP has enjoyed Al Qaida's networks, money, logistics, as well as its tactics. In case of such collaboration, the leadership's perception of getting a working weapon to the target is probably that it would involve medium complexity.

3. Arguments for Perception of Low Complexity:

There is no evidence suggesting that the leadership perceives a low degree of complexity in getting a working weapon to the target.

4. Final Estimation

Overall, under its current configuration, the leadership is likely to perceive that getting a working weapon to the target involves high levels of complexity.

6. How this factor might change in the next five years.

If the US drone attacks end, this would reduce the fear of constant surveillance by US drones. This in turn would likely increase the chance of unification, as well as lead to more cooperation among TTP factions, which could change the leadership's perception of the flexibility of getting a working weapon to a target. In addition, return of the Taliban to the Afghanistan, would play a significant role in the mobility of the TTP in the region. In this case, the group could take the weapon from FATA region to the Afghanistan. Consequently, they would have more options.

F. Leadership's Perception of the Trustworthiness of Relevant Group Members

1. Arguments for Perception of High Trustworthiness:

There is no open source evidence to indicate that leaders have a high level of trustworthiness with respect to relevant group members.

2. Arguments for Perception of Medium Trustworthiness:

As mentioned earlier, all factions are believed to operate independently. However, major attacks do require some amount of cooperation between factions. In such cases the TTP leadership has demonstrated a perception of a medium level of trustworthiness among relevant members. For instance, the Peshawar Pearl Continental Hotel bombing on June 9, 2009; the assault of Pakistan Army's Headquarters (GHQ) in Rawalpindi on October 10, 2009; the Marriot Hotel bombing on September 20, 2008; and both the failed and successful assassination attempts on Benazir Bhutto are examples of cases where the leadership seems to have shown that they perceive a medium level of trustworthiness among members of the TTP.

3. Arguments for Perception of Low Trustworthiness:

There are many reasons why the leadership might not trust its group members. First, as previously discussed, the TTP is not a unified group. Not only is the TTP competitive, but it is also constantly factionalized (as discussed at the beginning of this profile). In addition, there are strategic differences among factions.

Moreover, there are other elements that are indicators of low trustworthiness among TTP members:

- The demotion of Faqir Mohammad in March 2012, because of his alleged peace talks with Pakistani government without TTP leader's approval.
- Taliban leaders have reduced the size of their security escorts to one or two men who possess their complete trust.
- Only the most trusted are allowed into meetings, security has become tighter.

- Taliban security agents are constantly checking the identity and credentials of those active within the movement.

4. Final Estimation:

Among TTP's factions, there is a perceived low trustworthiness of the other factions. However, there could be high trustworthiness at local levels, for instance among family or elements of the TTP with tribal ties. Nonetheless, the general level of trustworthiness is low. In summary, the level of trustworthiness in the intergroup is low and in the intragroup level is high, though not complete because of occasional internal power struggles.

It should be noted that the TTP might be able to competently pursue a nuclear attacks but only if it would act as a unified whole in action and purpose. Thus, the low level of trustworthiness among relevant group members likely plays an important role in their operations.

5. How this factor might change in the next five years.

The unification of the TTP factions would increase the leaders' perceived trustworthiness of its members. Theoretically, as mentioned before, an existential threat might give cause for the factions to unify.

G. The Leadership's Perception of the Reliability and Security of Communications

1. Arguments for Perception of High Reliability and Security:

There is no evidence to indicate the TTP leadership perceives that the reliability and security of communication tools is high.

2. Arguments for Perception of Medium Reliability and Security:

While the general perception among the leadership of the reliability and security of their communication is low, there is evidence indicating that during certain attacks crude walkie-talkies and even cellphones have been used. For instance, although American walkie-talkies are banned in Pakistan,⁶⁶⁷ "The PNS Mehran attack investigation team claimed to have seized US-made LXT-303 walkie-talkie sets from the naval facility."⁶⁶⁸ "These walkie-talkie sets are of the same type used by international forces in Afghanistan, Samaa TV reports."⁶⁶⁹ This emerged three days after another article from Asia News International said that Russian walkie-talkies were found at Mehran base.⁶⁷⁰ "According to sources, during a recent search of the bushes surrounding the eastern end of the runway, the walkie-talkie set—which is of Russian make—was found near the location from where the terrorists had entered the base."⁶⁷¹

Another situation revealing a possible perception of a medium level of reliability for communication tools occurs in the immediate timeframe before an operation. In such cases, there is typically not enough time for surveillance parties to impact the operation.

3. Arguments for Perception of Low Reliability and Security:

Due to US drones, communications are likely seen as unreliable and insecure. To counter the drones, the TTP has attempted to increase the "mobility, secrecy and anonymity" of communications.⁶⁷² Moreover,

⁶⁶⁷ "Terrorists used US-made walkie-talkies in Karachi naval base attack," *Asian News International*, May 29, 2011.

Available at: <http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=5300-1GF1-F11P-X13B&csi=344861&oc=00240&perma=true>

⁶⁶⁸ Ibid.

⁶⁶⁹ Ibid.

⁶⁷⁰ "Russian-made walkie-talkie set found near Mehran navy station runway," *Asian News International*, May 26, 2011.

Available at: <http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=52YB-41W1-F11P-X0V7&csi=344861&oc=00240&perma=true>

⁶⁷¹ Ibid.

⁶⁷² Ibid.

Pakistan Taliban commander Sahimullah Mahsud explained how TTP forces and leaders have tried to protect themselves from American UAV missile attacks.⁶⁷³ In addition, “Satellite or SMS [a form of text messaging on mobile phones] forms of communication are no longer used. All communications are done orally or by code.”⁶⁷⁴ This was also the case for bin Laden, who relied on verbal communication.

In the article “Pakistan naval base attack ‘well planned’ - probe team,”⁶⁷⁵ Salis bin Perwaiz explains “The fact that no cell phone was found after the attack shows how meticulously the terrorists had planned the raid, making it difficult for the investigators to determine how and where the attack was conceived.”⁶⁷⁶ He adds “He [SSP (Senior Superintendent of Police) Investigation East Zone Niaz Ahmed Khosa] said it would be a major development if a cell phone of any terrorist was found as it might help them make headway in the investigations.”⁶⁷⁷

4. Final Estimation:

As addressed above, leadership perception of the reliability and security of communications is likely to be low, mainly because of US capabilities in tracking communications. It is believed that the US has carried out several successful drone strikes based on traced communications.

5. How this factor might change in the next five years.

The only factor that might change the perception of the TTP leadership of the reliability and security of communication tools is a halt in the drone strikes.

H. The Leadership’s Perception of Group Competency

1. Arguments for Perception of High Competency:

All evidence suggests that the leadership’s perception of group competency is high. As demonstrated even by their latest attack, the TTP is capable of recruiting highly competent forces to carry out their attacks. The Mehran Naval Base Incident in May 2011 is an excellent example of high competency in the group. “After bin Laden was killed by American Navy Seals in Abbottabad, 60 kilometers north of Islamabad, militants decided the time was ripe for major action.”⁶⁷⁸ The PNS Mehran attack came only 20 days after bin Laden’s death. “Within a week, insiders at PNS Mehran provided maps, pictures of different exit and entry routes taken in daylight and at night, the location of hangers and details of likely reaction from external security forces.”⁶⁷⁹ “The preliminary investigation report of the PNS Mehran attack has revealed that 7-8 terrorists fled the naval base after launching attacks on the Pakistani navy (on May 22). The report said that the retaliatory action against terrorists holed up in a building inside the base lasted until 11:30am on May 23.”⁶⁸⁰ This article says that there were only 12 total terrorists that infiltrated the base. If this number is accurate, then most of the terrorists were able to escape – typical of other major incidents involving the TTP. According to *The Financial Times*: “Ex-commando[s] [were] among 3 held for Mehran episode.”⁶⁸¹ Choosing

⁶⁷³ This is not directly related to the attack on the GHQ, but it is still a senior TTP commander talking about communications security. Jamestown Foundation, *Terrorism Monitor*, Volume: 7, Issue: 31, October 23, 2009. http://www.jamestown.org/uploads/media/TM_007_d28e62.pdf. The Interview with Sahimullah Mahsud was originally from a Belgian newspaper, Le Sior dated October 12, 2009.

⁶⁷⁴ Ibid.

⁶⁷⁵ “Salis bin Perwaiz, “Pakistan naval base attack ‘well planned’ - probe team,” *The News*, May 26, 2011. Available at: <http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=52Y8-3C61-JC8S-C04C&csi=10962&oc=00240&perma=true>

⁶⁷⁶ Ibid.

⁶⁷⁷ Ibid.

⁶⁷⁸ Shahzad, “Al Qaida had warned of Pakistan strike.”

⁶⁷⁹ Ibid.

⁶⁸⁰ “Pakistan: 7-8 terrorists fled Mehran base: report,” *Right Vision News*, June 7, 2011. Available at:

<http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=531T-N9H1-JDKC-R4C2&csi=354856&oc=00240&perma=true>

⁶⁸¹ “Ex-commando among 3 held for Mehran episode,” *The Financial Times*, May 31, 2011. Available at:

<http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=530J-G8X1-DYTM-9471&csi=140610&oc=00240&perma=true>

Mehran Naval base, per se, indicates that the terrorists “were well aware of the significance of this vital installation, Pakistan Naval Station Mehran, and its role in counter-terrorism efforts.”⁶⁸² “It is learnt the navy is amazed at the level of preparedness and pre-mission information, including intricate details about tower-positions, light movement frequency, patrolling, cameras and exact location and comprehensive knowledge of the target once in sight.”⁶⁸³ “Sources revealed four guerrillas, dressed in black, entered the premises from the Korangi (Faisal Town) side, using bushes on the bank of the drain as camouflage. After reaching the boundary wall, they not only blew a hole with sophisticated explosive, having little spark and sound, they also cut the charged wires after climbing up, using ladders. Once in the compound, they used the blind spots left within the two towers 100 metres apart. It seemed they had worked on the movement of lights to minute details, figuring exactly when to sneak ahead by evading the moving lights. They also had complete information vis-à-vis placement of cameras (including their panning circumference and timing) in and around the hangars, housing the aircraft.”⁶⁸⁴

The Mehran attack, among others, reveals high group competency. Other such attacks include: the attack on ISI headquarters in May 2009; the assault on Pakistan Army’s general headquarters (GHQ) in Rawalpindi in October 2009; the bombing of the CIA forwarding base in Khost⁶⁸⁵ in December 2009; and the attack on Lahore’s Federal Investigation Agency Academy in October 2009.⁶⁸⁶

The TTP members are also highly competent when it comes to operational capabilities:

- Technical Expertise:
 - Information on how to build improvised explosive devices has been widely disseminated throughout the entire Taliban organization. These include roadside bombs, vehicle bombs, and suicide vests. It is also possible that the Pakistani Military had provided some of this training back in the 1990s when many of these fighters were allied with them in the fight for Kashmir.⁶⁸⁷
- Propensity to Innovate:
 - Propensity to innovate in this organization, and its associated movements, is very high. They continually adapt and evolve in their tactical methods. The TTP members have obtained uniforms from the Pakistani military and wear them to either bypass security or surprise their adversary, as they did during the GHQ attack. In addition they have deployed a variety of improvised explosive devices as well.
- Networking Capabilities:
 - The TTP’s potential access to the greater Taliban and Al Qaida networks likely facilitate **and** accelerate organizational learning. This access also provides the TTP with various levels of support from financial, to physical, to tactical.⁶⁸⁸

⁶⁸² “Why did terrorists pick PNS Mehran?” *Right Vision News*, May 25, 2011. Available at:

<http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=530K-9RF1-JDKC-R2MJ&csi=354856&oc=00240&perma=true>

⁶⁸³ “The close combat at PNS Mehran,” *Right Vision News*, May 26, 2011. Available at:

<http://w3.nexis.com/new/docview/getDocForCuiReq?Ini=52YN-Y1S1-F12F-F2CH&csi=354856&oc=00240&perma=true>

⁶⁸⁴ Ibid.

⁶⁸⁵ The Khost attack also involved very sophisticated planning and is a good example of high group competency.

Humam Khalil Abu Mulal al-Balawi a Jordanian physician deceived US intelligence operatives into believing that he was willing to work with them. As Joby Warrick puts it in his book, *The Triple Agent*, Balawi became a “golden source” when he informed the US he met Ayman al-Zawahiri and even “supplied a summary of Zawahiri’s physical condition as well as his medical history, providing details that perfectly matched records the CIA had obtained years earlier.” See Joby Warrick, *The Triple Agent* (New York, New York: Doubleday, 2011), pp. 126- 127.

⁶⁸⁶ Charles P. Blair, *Anatomizing Non-State Threats to Pakistan’s Nuclear Infrastructure: The Pakistani Neo-Taliban* (Washington, DC: The Federation of American Scientists, 2011), pp. 144 – 147.

⁶⁸⁷ Jayshree Bajoria, “Pakistan’s New Generation of Terrorists,” *The Council on Foreign Relations*, (15 December 2010). Available at:

http://www.cfr.org/publication/15422/pakistans_new_generation_of_terrorists.html?breadcrumb=%2Fbios%2F13611%2Fjayshree_bajoria%3Fgroupby%3D1%26hide%3D1%26id%3D13611%26filter%3D456

⁶⁸⁸ Jayshree Bajoria, “Pakistan’s New Generation of Terrorists,” *The Council on Foreign Relations*, (December 15, 2010). Available at:

http://www.cfr.org/publication/15422/pakistans_new_generation_of_terrorists.html?breadcrumb=%2Fbios%2F13611%2Fjayshree_bajoria%3Fgroupby%3D1%26hide%3D1%26id%3D13611%26filter%3D456

- Familiarity/Knowledge of the Target Environment:
 - The TTP is very familiar with the target environment, which may include their own areas within FATA, or with government facilities.

More evidence for the perceived high competency among group members is the case of making a *dirty bomb*. Although, as Joby Warrick explains “it is unclear who was in charge of making the device, the Al Qaida or the TTP or it was collaboration among different groups,”⁶⁸⁹ the ability to make such a device, per se, would increase the perception of leaders of group competency. Even “in the final analysis the CIA didn’t know what to make of it. Finally, it is not clear if that material still exists out there. Maybe the TTP has those radiological sources but hasn’t yet used them. It was completely authenticated by people at very high levels.”⁶⁹⁰

Finally, the latest example for high perception of group competency is related to Pakistani nuclear assets. “In a 21 March Pashto-language video statement posted to pro-Al Qaida, pro-TTP website Babul-Islam, Khalid listed, among several other ostensibly far-fetched goals, the TTP’s aim to ‘utilize Pakistan’s strengths such as its Army, weapons, atom bomb, technology, and other power[s] for the betterment of the Muslim *umma* [community] and Islam’s survival.’”⁶⁹¹

An RDD in Pakistan?

During May-June 2009, in a wiretap in South Waziristan, two Taliban commanders were overheard using the Pashtun word of *itami*, meaning “atomic” or “nuclear,” in the context of “Mehsud has *itami* device.” While the CIA’s estimation was that “Mehsud lacked the resources to acquire a nuclear weapon,” Panetta [then head of the CIA] and his top advisors “settled on a more plausible explanation: a Pakistani terrorist group had acquired a *dirty bomb*.” A dirty bomb is much less deadly, but cheaper and easier to make. This, as Joby Warrick puts it “was a big deal” for the Obama administration. When they got these intelligence intercepts, National Security Advisor Jim Jones went to Pakistan.ⁱⁱ

ⁱ Joby Warrick, *The Triple Agent*, (New York: Double Day, 2011), p. 63.

ⁱⁱ Author’s interview with Joby Warrick, October 2, 2011.

2. Arguments for Perception of Medium Competency:

No evidence

3. Arguments for Perception of Low Competency:

Not enough open source evidence exists that would lead one to believe that the leadership’s perception of group competency is low. However, some argue that the TTP members are “just barely above a gangster”⁶⁹² and not highly competent. Joby Warrick argues that the TTP members, especially Baitullah Mehsud, have shown real brutality while carrying their operations; this includes acts out of line with religious orders. Warrick adds that Mehsud has smuggled arms, and was only willing to improve the position of his own clan.⁶⁹³

4. Final Estimation:

As explained above, all evidence illustrates that leadership’s perception is of competency in the group is high.

5. How this factor might change in the next five years.

A large number of lost highly trained soldiers and commanders would likely change the leadership’s perception of competency among the group.

I. Leadership’s Perception of Existential Threat(s) to the Group

Please note that in analyzing the TTP leaders’ perception of existential threats one should differentiate between the TTP as a whole and its various factions. While, the TTP as a whole may perceive ideological

⁶⁸⁹ Charles P. Blair’s interview with Joby Warrick, October 2, 2011.

⁶⁹⁰ Ibid.

⁶⁹¹ *TTP Leader Says Pakistan’s Nuclear Assets Among TTP Targets*, Open Source Center, May 1, 2012, p.1.

⁶⁹² Charles P. Blair’s interview with Joby Warrick, October 2, 2011

⁶⁹³ Ibid.

existential threats, its factions may face more operational threats.

1. Arguments for Perception of High Existential Threat:

Elements of the PNT and some of their allies are bound by a belief that the Taliban's resurgence heralds the prophesized "End Times." Specifically, the geographic regions—historically referred to as Khurasan—they seek to "liberate" are believed to be the focal point from where the Mahdi will arise.⁶⁹⁴ *Hadith*⁶⁹⁵ traditions depict the Mahdi leading his followers from combat victory in Khurasan—perceived by some militants to be those battles that are now taking place in Afghanistan and the tribal areas of Pakistan—before moving through Iran, Iraq, Syria and, ultimately, battling the anti-Christ in Palestine.⁶⁹⁶ While it is unlikely that all members of the PNT and their allies perceive of their struggle as part of this larger campaign, there is arguably a general belief that a precursor to the liberation of Jerusalem is the liberation of Kabul.⁶⁹⁷ Syed Saleem Shahzad indicates that "in the ideological perspective of Al Qaida, this [the 9/11 attack and 26/11 Mumbai attack] was to be a precondition for the 'End of Time' battles which were referred to by the Prophet Muhammad."⁶⁹⁸ Based on this latter notion," explains Shahzad, "jihadi websites are calling on Muslims to support the Afghan jihad."⁶⁹⁹ Thus, the high existential threat (the defeat of the Mahdi) in the TTP leadership perspective is based in theology. For preventing such a threat they have to overcome the US as an existing evil to be able to win *the divine battle*.

2. Arguments for Perception of Medium Existential Threat:

As mentioned earlier in this profile, the TTP is a factionalized group, and its members constantly compete with each other. Thus, a number of subgroups might perceive other subgroups as a threat to their existence. Even at the subgroup level, however, there are some differences among methods and goals... For instance, some of the TTP leaders, including Maulavi Nazir, are committed to Mullah Omar for not targeting Pakistani forces. However, this is not the case for Gul Bahadar, another TTP leader.

3. Arguments for Perception of Low Existential Threat:

Because of the TTP's control of FATA as well as sections of "Khyber Pakhtunkhwa" (formerly known as North-West frontier Province – NWFP) there is clearly low perception of existential threat among the group's leaders.

4. Final Estimation:

As explained above, in general the TTP's perception of existential threat is low. However, with the constant threat of drone attacks, it is likely that the TTP's leadership conceives of themselves as being in a highly vulnerable situation – a high threat of existential threats.

5. How this factor might change in the next five years.

⁶⁹⁴ An area that includes Afghanistan, parts of Iran, Pakistan's tribal areas, Turkmenistan and parts of Uzbekistan.

⁶⁹⁵ The *Hadith* is an oral tradition that delineates the words and acts of Muhammad. An exploration of how the Mahdi was handled, vis-à-vis transmission of the Hadith, can be found in Wilferd Madelung, "Abd Allāh B. Al-Zubayr and the Mahdi," *Journal of Near Eastern Studies*, Vol. 40, No. 4, (October, 1981), pp. 291-305.

⁶⁹⁶ See David Cook, *Contemporary Muslim Apocalyptic Literature* (Syracuse, NY: Syracuse University, 2005), p. 173. See also Syed Saleem Shahzad, "Plot to Divide the Taliban Foiled," *Asia Times Online*, July 23, 2008. Available at: http://www.atimes.com/atimes/South_Asia/JG23Df01.html

⁶⁹⁷ Cook, *Contemporary Muslim Apocalyptic Literature*, p. 174. David Cook has explained how Abdallah 'Azzam—considered to be Bin Laden's mentor—"popularized the position of Afghanistan as the messianic precursor to the future liberation of Palestine from Israel." Ibid, pp. 173-174. For a description of Azzam and his view on the Mahdi see David Zeidan, "The Islamic Fundamentalist View of Life as a Perennial Battle," *Middle East Review of International Affairs*, Vol. 5, No. 4 (December 2001). Available at: <http://meria.idc.ac.il/journal/2001/issue4/jv5n4a2.htm>

⁶⁹⁸ Syed Saleem Shahzad, *Inside Al Qaida and the Taliban*, (London: Pluto Press, 2011), p. xiii.

⁶⁹⁹ Cook, *Contemporary Muslim Apocalyptic Literature*, p. 174. David Cook has explained how Abdallah 'Azzam—considered to be Bin Laden's mentor—"popularized the position of Afghanistan as the messianic precursor to the future liberation of Palestine from Israel." Ibid, pp. 173-174. For a description of Azzam and his view on the Mahdi see David Zeidan, "The Islamic Fundamentalist View of Life as a Perennial Battle," *Middle East Review of International Affairs*, Vol. 5, No. 4 (December 2001). Available at: <http://meria.idc.ac.il/journal/2001/issue4/jv5n4a2.htm>

If Afghanistan stabilizes, the TTP would face high threats. First of all, it would lose its control of the Afghan-Pakistani border; moreover, a stable Afghanistan might be more effective in helping the US in defeating the TTP. In addition, if the government of Pakistan assists the US more effectively, or in general, and all regional states cooperate with the US then the TTP would face a high existential threat. Moreover, if a highly-trained army actually surrounds their geographical locations, it would pose a high existential threat for the TTP.

J. Leadership's Preference for "Failure"

1. Arguments for Preference for Fail Deadly:

The TTP does not believe in a global constituency, and it only trusts in God's constituency. As with "Perception of Existential Threat," one can link in the concept of Khurasan and the belief that battles are divinely preordained and in accordance with the return of the Mahdi and Christ for the Final Battle. In this case, the leadership preference for failure likely would be fail deadly.

2. Arguments for Preference for Fail Impotent:

The TTP likely prefers fail impotent inside Afghanistan and Pakistan, because of their supporters as well as their financial backers in the region.

3. Final Estimation:

Based on the ideological beliefs of some TTP leaders about the final battle, as well as their previous operations (for instance not hesitating in using kids as suicide bombers); one can argue that the leadership prefers to fail deadly.

4. How this factor might change in the next five years.

There is no reason to think the leadership preference of failure in the next five years will change.

III. Conclusion

Overall, based on all current knowledge of the group what type of nuclear C&C do you think the group would employ and why?

Assertive: Based on the TTP's command and control experience in previous attacks, the group is likely to adopt an assertive nuclear command and control structure. Such a conclusion is largely based on the TTP's internecine and fractious history both within and between its many factions. The group simply cannot rely on flexibility in the field and their tolerance for uncertainty would be low in such a crucial strategic mission.

Profile 3: Apocalyptic Millenarian Cult

The Star Children of Xenon

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I. Pre-Analysis

The Star Children of Xenon (SCX) is a fictional group that was modeled on a combination of the Church of Scientology (COS) in terms of its organization and the International Raëlian Movement, a “UFO religion” established by former French race car driver Claude Vorilhon, with respect to its anticipation of the return of the alien progenitors of humanity. What makes this particular UFO cult dangerous is their techno-fetishism and belief that in order for their alien progenitors to return, the earth must be cleansed of immoral humans through catastrophic violence. The extraterrestrials are seen as superior, as they are scientifically more advanced than human beings. In some cases, we have referred to real groups to illustrate some of the points below.

A. General Background of the Group

The SCX organization was established 43 years ago in Canada by a creative pulp fiction writer named Thomas Edgerton, who claimed to have been contacted by alien beings while hiking in the Cape Breton Highlands in Nova Scotia. During that life-changing event, he was allegedly brought aboard an advanced spacecraft and whisked to a distant planet called Xenon. There he was supposedly informed by his hosts that humans were originally the offspring of the Xenons, but that they had been genetically engineered to enable them to live on planet Earth. He was also told that the Xenons were distressed about the way in which their “children” had evolved, as they were now threatening other species and the entire planet’s biosphere. Edgerton was told that he must organize a vanguard of “morally-elevated” humans who must alter the current course of human development in order to ensure the survival of Earth and the security of the entire cosmos. Upon his return to Earth, Edgerton moved to Vancouver Island in British Columbia and recruited a small band of dedicated followers. Over the decades the SCX has grown into a large international organization with branches in Canada, the US, western and eastern Europe, Australia, New Zealand, and Japan; it now numbers over 60,000 members, many with scientific training. Although its founder died in 1997, the SCX is currently governed by a large, elaborate bureaucratic organization and has extensive landholdings, on which it has built modern building complexes, including scientific laboratories and “landing pads” in expectation of the return of the Xenons to Earth.

B. Identification and Brief Exploration of the Group’s Key Decision Maker(s)

Thomas Edgerton was obsessed with the idea that he was the chosen one, the Messiah, one who has to save the world and the whole cosmos. When he was a child he was diagnosed as dyslexic and could not meet the high hopes of his parents (a physicist and a lawyer) to become a medical doctor. His parents had treated him with disrespect and anger for his disabilities at school.⁷⁰⁰ At the same time, he had dreamed of

⁷⁰⁰ Both Shoko Asahara of Aum Shinrikyo as well as the Raëlian’s Claude Vorilhon experienced painful and humiliating experiences during their childhood and early adulthood. “Published reports suggest that he [Shoko Asahara] was an ambitious and increasingly frustrated child. His partial sight [stemming from infantile glaucoma] gave him advantage at schools for the blind, and his aggressive ways made him a bully.” Jonathon B. Tucker, *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge, MA: MIT Press, 2000), pp. 208-209; “Raël’s biological father, Marcel was a Jew who fled Alsace during the Nazi Regime in World War II to live with his Jewish relatives in Ambert. He

becoming a famous writer and of impressing his parents and the public with his writing skills.⁷⁰¹ However, the books (mainly pulp fiction) that he had all written with painful difficulties, never gained popularity. Therefore, Edgerton has always felt under-appreciated and rejected by his social environment.

However, his supposed abduction by the Xenons has shown him what he in fact had always believed: that he had been born in order to fulfill a greater purpose which was superior to the mundane matters, but adequate to his outstanding personality. He then dedicated himself to the tasks given to him by the Xenons: to ensure the survival of the Earth and the security of the entire cosmos irrespective of risks and costs.

The SCX is a highly centralized and bureaucratized international organization, which is composed of a dizzying array of diverse functional components and a host of front organizations. Ordinary group members are not privy to the activities of the most secretive components of the organization, in particular the group's private secret service (the Star Gazers), paramilitary security forces (the Star Troopers), aggressive legal apparatus (the Star Chamber), and its laboratories engaged in genetic engineering experiments or refining weapons delivery systems. Hence there is a select and restrictive leadership group (the Star Command), whose members are divided into several specialized functional components, which effectively run the organization in an authoritarian, top-down fashion. Moreover, the SCX contains components specifically designed to monitor "ideological deviations" or "disruptive behaviors," in which case it compels the identified individuals to undergo systematic "re-education" and perform hard labor in secret detention facilities, labeled "gulags" by former members. Lower level administrative components take their orders directly from the senior leadership group, and a number of SCX front groups have been established to recruit new members and raise funds, e.g., "human improvement" psychotherapy groups, "educational" organizations, addiction treatment groups, "charitable" organizations, science-fiction reading and film clubs, and "civil rights" organizations. The latter devote most of their time and energy to opposing all efforts by governments and private lobbying groups, no matter how legitimate, to crack down on the problematic behavior of various "alternative religions" and other types of non-mainstream groups, including the SCX itself.

C. Ideology

The SCX is a "UFO cult" with an apocalyptic, world transformative agenda. In order to lay the groundwork for the peaceful return of the Xenons to Earth, its members believe they must quickly transform the consciousness of existing human societies, if necessary by waging catastrophic violence against those "morally-debased humans" who threaten the survival of the planet and the well-being of the entire cosmos. Unless they succeed in elevating the consciousness of humans and eliminating those engaged in destructive activities, the Xenons will not return to Earth as benefactors to usher in a new age of human and technological progress, but will instead return in order to eradicate their own genetically-engineered

returned to his wife and family in Alsace after the war ended, leaving his teenager lover, Colette Vorilhon, pregnant in Ambert. Marcel continued to visit Colette after "Claudy" was born, and when the clandestine couple went off on trips, they left the infant [Raël or Claude] in the care of Colette's unmarried elder sister Therese. When Claude turned seven, his mother placed him in a boarding school in Puy-en-Velay. (Claude suffered intensely from that), claimed his aunt Therese. When he returned home, he had violent altercations with his mother and often arrived at his aunt's house weeping." Susan J. Palmer, *Aliens Adored: Raël's UFO religion* (New Brunswick, NJ: Rutgers University Press, 2004), p. 32.

⁷⁰¹ Both Shoko Asahara of Aum Shinrikyo as well as the Raëlien's Claude Vorilhon have developed the idea that their existence is more meaningful than the ones of other people. However, their high ambitions were thwarted. After these frustrating experiences they both started to perceive their lives to be dedicated to a superior goal. "Raël as a child had 'no idea I would be doing what I am doing now, but I did not expect to be ordinary. What I wanted was to be the first French [race-car] driver, to be world famous – world champion for Formula one.' " Though his efforts were thwarted: "[Claude Vorilhon's] ambition was to become a racing car driver. Claude Vorilhon never achieved this goal, mainly because of the expensive nature of the sport and his lack of success in gaining the necessary sponsorship. Vorilhon had to remain content with editing a small-scale motor sport journal." Susan J. Palmer, *Aliens Adored: Raël's UFO religion* (New Brunswick, NJ: Rutgers University Press, 2004), p. 32, and Christopher Partridge, *UFO Religions* (London: Routledge, 2003), p.49. " [Shoko Asahara] dreamed of becoming prime minister of Japan and hoped to attend the nation's most prestigious school, Tokyo University, but was refused entrance." Jonathon B Tucker, *Toxic Terror*, 208-209.

offspring. Given their pronounced emphasis on the employment of scientific methods and the development of advanced technologies, the leaders of the SCX can be characterized as “techno-fetishists.” Hence they are experimenting with genetic engineering and seeking to develop advanced mass-casualty weapons systems, including radiological and nuclear weapons, in their laboratory complexes in several countries. This is viewed as necessary in the event that it is necessary to eliminate large numbers of selfish, predatory, unenlightened humans. The SCX is particularly concerned with targeting industrial societies – in particular the US, Germany, Russia, China, and India – which they believe are applying their technologies in destructive ways that have resulted in contaminating the biosphere and may threaten to destroy the entire planet in devastating wars.

The justification of the group’s intentions comes from the abduction of their leader by the Xenons, as described above. During that life-changing event, he was allegedly brought aboard an advanced spacecraft and whisked to a distant planet called Xenon. There he was supposedly informed by his hosts that humans were originally the offspring of the Xenons, but have been genetically engineered to enable them to live on planet Earth. He was also told that the Xenons were distressed about the way in which their “children” [idea of parent-child relationship] had evolved, as they were now threatening other species and the entire planet’s biosphere. Edgerton was told that he must organize a vanguard of “morally-elevated” humans [idea of elite] who must alter the current course of human development in order to ensure the survival of Earth and the security of the entire cosmos.

D. Constituents

The SCX is a vast international organization with tens of thousands of members and very significant financial resources. Informed observers estimate the group has access to hundreds of millions of dollars, which have been strategically placed in bank accounts all over the world, including those in notorious offshore financial havens. This money derives from many sources, ranging from donations provided by numerous wealthy supporters and members, including celebrity movie stars; shrewd investments in international financial markets; equity from extensive real estate holdings; worldwide sales of SCX literature and promotional materials; the high fees charged by the group’s psychotherapy, addiction treatment, and educational organizations for services rendered; favorable judgments in law suits initiated by the Star Chamber against former members and external critics over the release of copyrighted materials; the free labor performed by its own members, who work long hours; and the confiscation of a significant percentage of the assets of the individuals who join the organization. Over the decades, several governments have charged the SCX with engaging in fraudulent, illicit, and criminal activities of various types, including the bribery of influential politicians and high-ranking officials, but its operations are so sophisticated that it has been very difficult to obtain convictions.

E. Specialists in the Group

The SCX numbers approximately 60,000 members internationally, the bulk of whom come from relatively high socio-economic strata in their respective countries and are relatively well-educated. Most have college degrees, many in the fields of psychology, social psychology, and creative writing, and nearly 800 members have received graduate-level training in various desired technical and scientific fields, such as astronomy, metallurgy, biochemistry, microbiology, physics, and engineering. Some of those scientists previously worked in their fields in the private sector before joining the group. In short, the SCX has made a sustained effort to recruit members with relatively high levels of scientific expertise.

F. Existential Challenges to the Group

The “civil rights” organizations devote most of their time and energy to opposing all efforts by governments and private lobbying groups, to crack down on the problematic behavior of various “alternative religions” and other types of non-mainstream groups, including the SCX itself. The group perceives a shadowy antagonistic power, inhibiting other people from seeing the truth. This challenge can also be understood as the group’s explanation for the fact why outsiders do not believe or even oppose the “obvious and only truth”.

II. Factor Analysis

The key things differentiating apocalyptic-millenarian (AM) groups from other types of extremist groups are 1) their core AM ideologies, 2) the observable behavioral (and presumed psychological) characteristics of most AM leaders, and 3) the cult-like mechanisms operating in many (but not all) AM groups. All of these factors combine to result in a general situation where the leaders of AM groups are loathe to delegate, distrust their subordinates and group members (whose competence they suspect), are intolerant of failure, and are rigid and inflexible, rather than flexible and adaptive. All of these traits would likely influence their RN-related decision-making and their preferred nuclear command and control arrangements. It also means that they would have an unusually wide range of potential targets, since they regard the entire external world as being controlled by the "forces of evil." However, every AM group is in some respects unique, so any broader generalizations must be recognized as such and not assumed to apply in a mechanical fashion to every group that may arise within this category.

A. The Leadership's Tolerance for Uncertainty

1. Arguments for High Tolerance:

It is important to mention that the mercurial charismatic leaders of some apocalyptic groups prefer to rely on a much more ad hoc, personalized, and haphazard chain of command and a far less formal division of functional responsibility, which may lessen their leaders' degree of command and control but at the same time act to increase these groups' organizational and operational security.⁷⁰² If the apocalypse is expected soon, general planning characteristics may also likely to be subject to changing dynamics. Particularly, the leader's tolerance for uncertainty may be higher due to his or her feeling of emergency than during earlier stages of the group's history.

2. Arguments for Medium Tolerance:

AM leaders of large organizations may end up displaying a medium tolerance for uncertainty simply because they have no other choice. In other words, the size and/or complexity of their organizations make it impossible for them to micro-manage all of its activities, which forces them to delegate responsibility to trusted lieutenants, thus increasing uncertainty.

3. Arguments for Low Tolerance:

Douglas E. Cowan divides religious groups into two types: "open source" religious traditions (or groups) and "closed source" religious traditions (or groups). The former are those in which the "fundamental building blocks of the religion ... are open to adaptation and modification by the religious participants," whereas the latter are those "which restrict deviation ... either partially or entirely," i.e., those in which the religious doctrines and rituals, once established by authoritative or "divine" leaders, are thereafter regarded as sacrosanct and unchangeable. Groups that espouse apocalyptic millenarian doctrines, in particular those with a cult-like organizational structure will almost always fall into the "closed source" category. As Cowan himself notes, for example, the COS is the "quintessential closed source tradition,"⁷⁰³ and the same can be

⁷⁰² "The most dramatic scenario described by Asahara was Armageddon, and the concept also justified the taking of life. Once one is caught up in cosmic war, Asahara explained, the ordinary rules of conduct do not apply." Mark Juergensmeyer, *Terror in the Mind of God. The Global Rise of Religious Violence* (Berkeley: 2003, University of California Press), p. 116. (Note how Asahara's world is still ambiguously torn between the 'ordinary' and the 'cosmic'.) "Raël announced a new chronology in 1977: Henceforth a new era had commenced with the day after the bombing of Hiroshima on August 6, 1945. Thus, 1977 became "year 31". This revision of the Western calendar highlights the millenarian aims of the group and reminds members of the emergency situation of living in the Age of Apocalypse...and how might he deal with the situation if the Elohim fail to show up on schedule?" Susan J. Palmer, *Aliens Adored: Raël's UFO Religion* (New Brunswick, NJ: Rutgers University Press, 2004), p. 80.

⁷⁰³ Douglas E. Cowan, "Researching Scientology: Perceptions, Premises, Promises, and Problematic," in James R. Lewis ed., *Scientology*, p. 61. Indeed, even cults whose leaders claim to reject doctrinal consistency and even appear to emphasize a "do your own thing" ethos, such as the Rajneeshees, have in fact been quite authoritarian, rigid, and

said of most other organizations justly characterized as cults, apocalyptic or otherwise. In these contexts doctrinal orthodoxies, even though group leaders may in fact periodically modify them, are always jealously guarded by those same leaders, who insist on rigid adherence. In short, there is a kind of built-in authoritarianism in the apocalyptic millenarian groups discussed here. This authoritarianism is a central part of a cult's world view. It comes along with the centralized legitimacy of defining reality (that only the leader has). He or she is the one who provides the new way of thinking, associated with stability and clarity. As long as people join a cult for their demand of exactly those 'goods,' it would be contradictory to reject his authority. "The rejection of the world and all its attachments led to a slavish and highly personal attachment to The Two [Leader of Heaven's Gate]. Without exception, every testament refers to them in terms of deep particular devotion. It was not the least of this group's delusions that they had cast off humanity's attachments; in reality all they did was replace a set of frequently tenuous old ones with an intense singular attachment to 'Do.' This is typical of charismatic millenarianism. In such movements there often occurs an intense breathless focus on the moment. Time is suspended and everything hangs in the balance. The leader is the source of holiness and life without him is unimaginable. In a poignant bit of irony, one testimony tells how "Do saved my life."⁷⁰⁴

In UFO religions, aliens are considered to be trustworthy gurus/masters as they will save humans spiritually and physically. A recurring theme in AC cults is the planet earth's invasion by extraterrestrial entities to rescue human beings from 'worldly cataclysm' and bring the world into an age of enlightenment.⁷⁰⁵ Hence, the UFO cults are dominated by the expectation of imminent worldly destruction, apocalyptic fear of an inevitable atomic war and nuclear annihilation.⁷⁰⁶ In March 1997, thirty-nine members of a UFO cult named Heaven's Gate killed themselves near San Diego, California, and their collective suicide exemplified the sense of fatalism for the world and desire for salvation by extraterrestrials.⁷⁰⁷ The UFO cults' predictions of worldly destruction are often described either in form of a global nuclear war or natural disasters. The 'chosen' ones will be saved by aliens, following the doomsday and the cleansing of the world.⁷⁰⁸

Leaders of AM cults tend to be paranoid of external threats that are often seen in national governments or any entity with high social and political power. (See corresponding conspiracy theories). Paradoxically, paranoia may cause the leader both to be simultaneously more prudent and more tolerant of violence.⁷⁰⁹ Paranoia increases with incidents of external threats, causing the leader to be even more prudent⁷¹⁰.

Generally, the leaders of AM groups have a low tolerance for uncertainty, since they tend to be "control

hierarchical in most respects. These contrasts are highlighted in Lewis F. Carter, *Charisma and Control in Rajneeshpuram* (New York: Cambridge University Press, 1990), pp. 37-8 and passim.

⁷⁰⁴ Ted Daniels, ed., *A Doomsday Reader: Prophets, Predictors, and Hucksters of Salvation* (New York: New York University, 1999), p. 209.

⁷⁰⁵ Daniel Wojcik, "Apocalyptic and Millenarian Aspects of American Ufoism," in Christopher Partridge eds., *UFO Religions* (London: Routledge, 2003) p. 274.

⁷⁰⁶ Ibid.

⁷⁰⁷ Ibid, p. 277.

⁷⁰⁸ Ibid, p. 279.

⁷⁰⁹ "The level of paranoia and anxiety within the cult was undoubtedly a contributing factor to Aum's propensity for violence. By 1994, paranoia among Aum members had reached a dangerously high level. Cultists believed they were under sustained chemical attack by a "state power" or "powers", and that these attacks were proof that Asahara's prophecies were coming true." Jonathan B. Tucker, *Toxic Terror*, p. 222. "Asahara's worst predictions were supposed to materialize sometime around the year 2000. As the months and years moved toward the end of the millennium, the anticipation had become so great that the followers felt that something had to happen. When the nerve gas was released in the Tokyo subways, many of Asahara's followers received the news with a sense of excitement and relief. They saw this attack as a vindication of Asahara's prophecies and thought that Armageddon was indeed upon them." Mark Juergensmeyer, *Terror in the Mind of God. The Global Rise of Religious Violence* (Berkeley: 2003, University of California Press), p.140.

⁷¹⁰ "Fearing assassination before all the "ripe fruit" could be harvested, they announced they were "withdrawing into the wilderness" to prepare for the demonstration." Robert W. Balch, "Waiting for the Ships: Disillusionment and the Revitalization of Faith in Bo and Peep's UFO Cult", in James R. Lewis ed., *The Gods have Landed: New Religions From Other Worlds* (Albany, NY: State University of New York Press, 1995), p.144.

freaks” preferring to micro-manage the activities of their groups. Small groups are relatively easy for leaders to exert direct control, but larger groups force leaders to delegate responsibility and control.

In the context of AM groups, the charismatic and often authoritarian leader of the group is likely to be personally involved in making key RN attack decisions, though he or she may delegate control over the details of the operation to trusted subordinates with military experience, scientific knowledge, or high-level organizational skills. It is far less likely, though theoretically possible, that loyal lieutenants, disgruntled associates, or insubordinate factional leaders would be able to make such important decisions on their own initiative, especially in cult-like groups, all the more so since carrying out RN attacks would require the expenditure of considerable financial and human resources. The personal involvement of the leader can be due to the fact that since cults consider their terrorist actions in the realm of their ideology, they perceive them as a procession to a higher stage or the pursuit of a super-ordinate goal. Such divine actions must be carried out by an appropriate actor, like the leader, who as the ‘source of knowledge,’ has a divine attachment.

Obsession with an apocalyptic ideology does not necessarily mean that the leaders of AM groups act irrationally. In order to reach their goals they may act very prudently and strategically in the context of their norms and worldview.⁷¹¹

Authoritarian apocalyptic millenarian groups are very unlikely to adopt the kind of horizontal “leaderless resistance” system in which fully autonomous cells operating within the same ideological milieu have no common centralized leadership, a system that can potentially provide more organizational and operational security on the individual cell level.⁷¹² For instance, when Heaven’s Gate lacked a leadership structure for several months, the group immediately fell apart. Particularly with claims of acting on instructions from the next level, some members tried to deviate from the rules.

4. Final Estimation:

The Star Children of Xenon’s level of tolerance for risk and uncertainty is likely to be low. Since the leaders of AM groups tend to be “control freaks” with a low tolerance for uncertainty, the main factor that forces them to delegate responsibility is the size and complexity of their group. Although they would generally prefer to exercise direct control over all of the group’s activities in order to reduce uncertainty, they are forced to delegate some responsibility to others, thereby increasing uncertainty.

5. Factor Weight:

AM groups tend to be led by charismatic leaders who believe they have some special talent, dispensation, or mission, often bestowed upon them by divine forces. Hence those types of leaders are more inclined to have a low tolerance for uncertainty than the leaders of other types of groups. And to the extent their groups have adopted cult-like characteristics, their tolerance for uncertainty is arguably reduced even further, given that those groups employ extraordinary mechanisms of social control to control the behavior and the very thoughts of their members.

6. How this factor might change in the next five years.

There are no likely variables to alter this conclusion, since the peculiar nature of the leaders, goals, and obsessions of AM groups is precisely what distinguishes them from the leaders of other types of groups.

⁷¹¹ “Raël’s reaction to society’s hostile reaction to his political aspirations was both rational and prudent. Raël ordered his followers to abandon the pursuit of genocracy, explaining that “we must choose between spreading the message and the genocracy. We are not ready to fight on two fronts... [at any rate] thus far we lack a tool to measure the intelligence of an individual”. Susan J. Palmer, *Aliens Adored: Raël’s UFO Religion* (New Brunswick, NJ: Rutgers University Press, 2004), p. 86, see also page 89, supporting the impression that Raël was a very rational and prudent actor.

⁷¹² ‘The Two solved the problem by eliminating any possibility of individual revelation.’ Robert W. Balch, “Waiting for the Ships: Disillusionment and the Revitalization of Faith in Bo and Peep’s UFO Cult, p. 154. Again it becomes clear, that authoritarian power is a result of the leader’s legitimacy to define ‘knowledge.’

B. The Leadership's Definition of "Success"**1. Arguments for Success Entailing a Specific Outcome:**

AM groups do not only apply weapons of mass destruction to pursue eschatological goals (e.g. 'purifying the earth'), but also for ideologically-subordinated purposes, i.e. to test technologies and to retaliate for betrayal of dissociating former members. Aum dispersed *sarin* throughout a local court building, in order to kill three judges who he expected to judge against him in a civil suit. Seven people were killed and 144 injured, illustrating Aum's willingness to accept serious random casualties in the pursuit of a specific goal.⁷¹³

Given their megalomaniacal temperaments and grandiose eschatological goals, AM leaders would be strongly inclined to find only a specified pre-determined outcome to be acceptable, and would be very unhappy to have to accept anything less. In some cases, they could not tolerate failure of any kind. A good example of such leaders would be the Reverend Jim Jones of Peoples Temple, which was the scene of a mass suicide-murder at Jonestown, Guyana on November 18, 1978, in which 918 members of the temple died by either drinking punch with cyanide and tranquilizers, or by being injected with the deadly potion.⁷¹⁴ Peoples Temple members were catastrophic millennialists that had taken refuge in a socialist collective in Guyana in expectation of an imminent cataclysm that would destroy capitalist society. Jim Jones found it impossible to carry on once it became clear that his efforts to persuade Congressman Leo Ryan and his entourage that not everyone at Jonestown was happy and wanted to remain there had failed. He then authorized trusted subordinates to kill the visiting delegation and departing members at a nearby airfield and proceeded with his plans to have all of the members of his community commit ritual "suicide" (albeit at gunpoint).

Whether an apocalyptic millenarian group will opt to employ whatever RN weapons it manages to obtain immediately, or will instead threaten to use them in attempts to coerce or blackmail its enemies, will likely be both context- and situation-specific. However, given the burning desire of many such groups to begin cleansing the world of "evil" right away in order to precipitate their hoped-for apocalyptic scenarios, it seems far more likely that such groups would be motivated to deploy RN weapons sooner rather than later should they manage to acquire or fabricate them.⁷¹⁵ After all, the aims of these groups are almost never politically pragmatic, much less seriously negotiable, but are instead utopian and often delusional.

2. Arguments for Success Allowing for a Suboptimal Outcome in Target and/or Timing:

In the event that they fail to achieve their optimal predetermined objectives, AM leaders may be forced, however reluctantly, to accept a lesser result. Some degree of success would be preferable to no success at all, but they would still not be "happy campers." For instance, Shoko Asahara grudgingly accepted that his initial efforts to carry out attacks with chemical and biological agents had largely failed, but this realization only prompted him to continue with his CBW research and to plan other attacks. The attacks with the nerve agent *sarin* that were carried onto the Tokyo subway on March 20, 1995, was impure due to hasty preparation and did not cause the targeted destruction and the attack could not forestall police raids.⁷¹⁶ "No agent was released in this incident [failed attempt in 1995 to disseminate a biological agent, probably *botulinum* toxin] because the Aum operative reportedly had moral qualms and failed to insert the agent into

⁷¹³ Jonathan Tucker, *Toxic Terror*, pp. 217-218.

⁷¹⁴ Catherine Wessinger, "Introduction: The Interacting Dynamics of Millennial Beliefs, Persecution, and Violence," in Catherine Wessinger, ed., *Millennialism, Persecution, and Violence: Historical Cases* (Syracuse, NY: Syracuse University Press, 2000) pp. 25-27.

⁷¹⁵ "However, the higher and more divine stages of being are not open to any human being just like that. Neither are they readily allowed to higher stages. Therefore it is not self-evident that hate against the evil humankind is enough of an incentive to kill people. There also is this feeling of exceptionality connected to death. "Those who had to be persuaded obviously weren't ready to leave the planet." Robert W. Balch, "Waiting for the Ships: Disillusionment and the Revitalization of Faith in Bo and Peep's UFO Cult," in James R. Lewis, *The Gods Have Landed: New Religions from Other World*, (Albany, NY: State University of New York Press, 1995), p. 144

⁷¹⁶ Ian Reader, "Imagined Persecution: Aum Shinrikyo, Millennialism, and the Legitimation of Violence," in Catherine Wessinger ed., *Millennialism, Persecution, and Violence: Historical Cases* (Syracuse, NY: Syracuse University Press, 2000), p. 159.

the cases. Even so, investigators have found evidence suggesting that Aum planned to mass-produce these dispersal devices. No casualties were reported from any of the known biological attacks.”⁷¹⁷ Evidently, this did not stop Aum from proceeding.

Having failed at its repeated efforts to inflict mass casualties with biological agents, Aum focused its attention increasingly on chemical nerve agents.⁷¹⁸ Aum initially resorted to acquiring more generalized means of violence by producing biological weapons, but when these experiments failed, between June 1994 and 1995 Aum members murdered close to thirty people and injured thousands by chemical weapons such as poison gases.⁷¹⁹

AM groups can employ WMD for purposes of communication such as to convince the public of an imminent apocalypse and to propagate symbolic messages.⁷²⁰

Violence can be perceived by the AM group leaders as heralds of the expected and inevitable apocalypse, even though they themselves initiate it. According to Juergensmeyer, this kind of public violence can be understood rather in terms of a performance than as a political strategy.⁷²¹ With respect to this approach, success is more likely to be defined in broader terms, including a wide range of potential targets. The effective delivery of the message should therefore be added to the definition of success.

Whether a particular apocalyptic millenarian group decided to attack symbolic targets would likely be context- and situation- specific. Some groups would surely be interested in attacking what they regard as the “symbols of evil” in the world, whether these are human or material, in order to make a point. These symbols could conceivably include national monuments, popular destinations for tourists (like Las Vegas or Hollywood), sporting events, transportation systems, government buildings, economic centers, or anything else. However, attacking specific symbolic targets could easily be done in such a way as to kill large numbers of people,⁷²² so there is no necessary contradiction between targeting symbols and indiscrimination.

3. Arguments for Success Allowing for a Suboptimal Outcome Resulting in a “Fizz” Yield:

When AM leaders organize attacks that completely fail, they tend to be extremely unhappy and dissatisfied,

⁷¹⁷ Jonathan B. Tucker, *Toxic Terror*, p. 217

⁷¹⁸ Ibid.

⁷¹⁹ Ian Reader, “Imagined Persecution: Aum Shinrikyo, Millennialism, and the Legitimation of Violence”, p. 161.

⁷²⁰ “The cult leadership evidently believed that these incidents would wake up the general populace to the imminent dangers Asahara foresaw, lending credence to his predictions of impending doom. Aum’s first reported use of a biological agent was an unsuccessful attempt to spread *botulinum* toxin in the Tokyo region in April 1990.” Jonathan B. Tucker, *Toxic Terror*, p. 216. “The Aum Shinrikyo nerve gas attack might be closer to the symbolic, religious side. Each was the product of logical thought, and each had an internal rationale. In cases such as the Tokyo nerve gas attack that were more symbolic than strategic, however, the logic was focused not on an immediate political acquisition, but at a larger, less tangible goal.” Mark Juergensmeyer, *Terror in the Mind of God. The Global Rise of Religious Violence* (Berkeley: 2003, University of California Press), p. 126.

⁷²¹ “The very adjectives used to describe acts of religious terrorism – symbolic, dramatic, and theatrical – suggest that we look at them not as tactics but as *performance violence*. [...] Rather, like religious ritual or street theater, they are dramas designed to have an impact on the several audiences that they affect. Those who witness the violence – even at a distance, via the news media – are therefore a part of what occurs. Moreover, like other forms of public ritual, the symbolic significance of such events is multifaceted; they mean different things to different observers. This suggests that it is possible to analyze comparatively the performance of acts of religious terrorism.” Mark Juergensmeyer, *Terror in the Mind of God. The Global Rise of Religious Violence* (Berkeley: 2003, University of California Press), p. 126.

⁷²² “What was significant about such symbolically central times and places – and for that matter, central things, including subways and airplanes – is that they represent power. They were centers [...] of ‘concentrated loci of serious acts.’ Such places and times constituted the ‘arenas’ of society ‘where its leading ideas come together with its leading institutions’ and where ‘momentous events’ were thought to occur. When activists attacked such a place, be it the World Trade Center or the Kasumigaseki subway station in central Tokyo, during one of those momentous times, they challenged the power and legitimacy of society itself.” Mark Juergensmeyer, *Terror in the Mind of God. The Global Rise of Religious Violence* (Berkeley: 2003, University of California Press), p.141.

so much so that it may prompt them to punish failing subordinates and to initiate even more extreme measures against their designated enemies.⁷²³ This is possibly due to hatred that may motivate those violent actions. A “fizzle yield” might be tolerable (barely) if it caused their enemies a tremendous amount of hardship or elevated the prestige of the perpetrators, but megalomaniacs of this type normally find this type of failure intolerable.⁷²⁴ For instance, David Koresh, the prophet of the Branch Davidian community in Waco, Texas, was the leader of a dissident group of the Seventh-Day Adventist Church and remained under the fifty-one-day siege at the Mount Carmel Center in February 1993.⁷²⁵ The “intrinsic instability of charismatic leadership” is a factor that promotes violence by marginal religious and social groups.⁷²⁶ David Koresh’s increasingly erratic and authoritarian behavior as his efforts to successfully negotiate with the authorities met with failure is an example of this instability. The fire was allegedly set by Koresh and his followers, as “Koresh saw himself as a Davidic messiah who brings in the final conflagration.”⁷²⁷ Eschatological or millenarian suicide could have been a cleansing fire, as the Davidians “believed that God did not want them to surrender to their enemies.”⁷²⁸

If the purpose of an RN attack was to cause mass casualties and mass destruction, in that case a “fizzle yield” would be humiliating even though it might succeed in terrorizing the group’s enemies. On the other hand, if terrorizing enemies is itself the goal, perhaps a “fizzle yield” would still have the desired effects.

4. Final Estimation:

As noted, AM group leaders fully expect to achieve their predetermined objectives, however delusional these may be, and are extremely unhappy when they fail to do so. This causes them to become angry and, at times, to behave even more erratically, often by lashing out at subordinates or group members. They would be hard-pressed to accept anything other than a specific outcome.

5. Factor Weight:

The nature of AM ideologies and the megalomaniacal personalities of the leaders of most AM groups arguably combine to make them less tolerant of failure than the leaders of other types of groups with different sorts of goals and objectives.

6. How this factor might change in the next five years.

There are no specific variables that might change this underlying reality with respect to most AM groups, although in the end even the most megalomaniacal, authoritarian, and charismatic leaders are sometimes forced to accept failure.

⁷²³ “Decision-making within the cult [Aum Shinrikyo] was strictly hierarchical and enforced by punishments that could include death.” Jonathan B. Tucker, *Toxic Terror*, p. 212.

⁷²⁴ “In a perceptive analysis of the Aum Shinrikyo movement, Ian Reader has linked Aum’s concept of cosmic war to a feeling of humiliation. According to Reader, the development of Asahara’s concept of Armageddon went hand in hand with a history of rejection experienced both by Asahara and by members of his movement. This sense of rejection led to conflict with the society around them, and these encounters in turn led to greater rejection. This downward spiral of humiliation and confrontation led ultimately to a paranoid attitude of ‘Aum against the world.’” Mark Juergensmeyer, *Terror in the Mind of God* (University of California Press, 2001), pp. 105-106; pp. 116-117. This observation parallels the experiences which the Raëlien’s leader Claude Vorilhon is assumed to have made when he did not achieve his goal of becoming a race car driver and ended up in publishing a journal of minor importance. If the feeling of humiliation and anger is the underlying theme of the leader’s activity, then he will be more likely to be satisfied with any kind of destruction and pain that he can cause to the people from the ‘evil’ world. p. 117.

⁷²⁵ Eugene V. Gallagher, “‘Theology is Life and Death’: David Koresh on Violence, Persecution, and the Millennium,” in Catherine Wessinger, *Millennialism, Persecution, and Violence: Historical Cases* (Syracuse, NY: Syracuse University Press, 2000), pp. 82-83.

⁷²⁶ Thomas Robbins and Dick Anthony, “Religious Totalism, Exemplary Dualism, and the Waco Tragedy,” in Thomas Robbins and Susan J. Palmer, eds., *Millennium, Messiahs, and Mayhem: Contemporary Apocalyptic Movements* (New York, NY: Routledge, 1997), p. 262.

⁷²⁷ Thomas Robbins, “Apocalypse, Persecution, and Self-Immolation: Mass Suicides among the Old Believers in Late-Seventeenth-Century Russia,” in Catherine Wessinger, ed., *Millennialism, Persecution, and Violence: Historical Cases* (Syracuse, NY: Syracuse University Press, 2000), pp. 217-218.

⁷²⁸ Ibid.

C. The Importance to the Leadership of Flexibility in the Field

1. Arguments for High Importance:

The mercurial charismatic leaders of some apocalyptic groups prefer to rely on a much more ad hoc, personalized, and haphazard chain of command and a far less formal division of functional responsibility, which may lessen their leaders' degree of command and control but at the same time act to increase these groups' organizational and operational security.

As an illustrative example, one can point to the organization created by the Bhagwan's cadres at the Rajneeshpuram compound in Oregon – which not only included the commune administration but also a number of businesses; a police force; an armed militia; other functional components (e.g., legal services); and the Rajneesh Medical Corporation, where biological agents were cultured and housed and biological attacks planned – as well as to the COS – which has a very elaborate structure that encompasses various “bases”; the Religious Technology Center, which was established to preserve doctrinal orthodoxy by rigorously controlling the application of the “technology” developed by Hubbard; the Rehabilitation Project Force, which punishes and “re-educates” members of the elite Sea Org[anization] who have allegedly deviated or engaged in “suppressive” [i.e., anti-COS] activities; and the Office of Special Affairs, the COS's secret service that is entrusted with carrying out “dirty tricks” against the group's real and imagined enemies.⁷²⁹ Often, these types of groups also create a host of front organizations that are ostensibly independent, but which in fact serve a variety of specialized functions for their parent groups, such as raising money by selling goods or providing services, identifying and attracting prospective recruits, doing “charitable” work to obtain external respectability, or perhaps even by carrying out covert actions of various types. It remains unclear whether the Bhagwan Shree Rajneesh authorized the attempts by his key subordinates at Rajneeshpuram to poison local Oregon voters by placing salmonella in salad bars, or whether they took these actions on their own initiative.

In the context of apocalyptic millenarian groups, the charismatic and often authoritarian leader of the group is likely to be personally involved in making key RN attack decisions, though he or she may delegate control over the details of the operation to trusted subordinates with military experience, scientific knowledge, or high-level organizational skills. It is far less likely, though theoretically possible, that loyal lieutenants, disgruntled associates, or insubordinate factional leaders would be able to make such important decisions on their own initiative, especially in cult-like groups, all the more so since carrying out RN attacks would require the expenditure of considerable financial and human resources. A highly compartmentalized secret society-type structure is better suited to the maintenance of both organizational and operational security, at least in the short run, and thus is particularly useful in carrying out clandestine and covert operations, including surprise attacks with RN weapons.

⁷²⁹ For the organizational structure of the Rajneesh Organization, both internationally and in Oregon, see Lewis F. Carter, *Charisma and Control in Rajneeshpuram: The Role of Shared Values in the Creation of a Community* (New York: Cambridge University, 1990), pp. 73-118. For that of the COS, see the brief overview in J. Gordon Melton, *Church of Scientology* (Signature Books, Inc., 2000), pp. 39-52, and the longer treatment in Roy Wallis, *The Road to Total Freedom: A Sociological Analysis of Scientology* (New York: Columbia University, 1977), as well as the details found throughout the many published accounts by disillusioned former Scientologists, such as Jon Atack, *A Piece of Blue Sky: Scientology, Dianetics and L. Ron Hubbard Exposed* (New York: Lyle Stuart, 1990), esp. parts 4-6; John Duignan with Nicola Tallant, *The Complex: An Insider Exposes the Covert World of the Church of Scientology* (Dublin: Merlin, 2008); Nancy Many, *My Billion Year Contract: Memoirs of a Former Scientologist* (no place: CNM Publishing, 2009); Jefferson Hawkins, *Counterfeit Dreams: One Man's Journey Into and Out of the World of Scientology* (Cedar Rapids, IA: Hawkeye Press, 2010); Marc Headley, *Blown for Good: Behind the Iron Curtain of Scientology* (Burbank, CA: BFG Books, 2010); Amy Scobie, *Scientology: Abuse at the Top* (Puyallup, WA: Scobee Publishing, 2010); and Margery Wakefield, *Road to Xenu: A Narrative Account of Life in Scientology, Edition 3*, (1996), retrieved from <http://www.cs.cmu.edu/~dst/Fishman/Xenu/>. It is significant that so many of these exposés were self-published, since it is indicative of the unwillingness of mainstream publishers to risk provoking the wrath and legal harassment of the COS. For the history of the COS' succession of intelligence services/dirty tricks units, see the fascinating online book-length study entitled “Scientology's Secret Service: The Hubbard Communications Office, Guardian Office and Office of Special Affairs.” Available at: <http://www.xenu.net/archive/go/history.htm>.

2. Arguments for Medium Importance:

The leaders of AM groups are not typically known for their overall mental and behavioral flexibility, since they tend to be authoritarian fanatics. Nor do they generally prefer to delegate important tasks to others, even though this may sometimes be necessary. They usually prefer to micro-manage important operations, but given the size or complexity of their organizations and the technical nature of particular operations, they may have no choice but to delegate to trusted subordinates. It is also possible that they will wish to delegate in order to ensure plausible deniability.⁷³⁰ Yet, for AM cult leaders there is not much need to deny violent attacks, since the latter are usually already justified within their worldview. Leaders would rather be personally involved than avoid getting their hands dirty. This would rather resemble opportunistic behavior which is less likely to be congruent with ideology- or obsession- driven personalities. The reactions of Aum cult members to Asahara's arrest and indictment parallel this view.

3. Arguments for Low Importance:

Authoritarian apocalyptic millenarian groups are very unlikely to adopt the kind of horizontal "leaderless resistance" system in which fully autonomous cells operating within the same ideological milieu have no common centralized leadership, a system that can potentially provide more organizational and operational security on the individual cell level.

To the extent that AM leaders believe that they have some special or divine dispensation or guidance, they may believe their own plans will be more likely to succeed. They do not specifically make this probabilistic calculation. But as a result of their self-centric conceptualization of the world, they deem themselves to be chosen so that it is their particular task. It is simply unthinkable (or not part of their worldview) to share a divine task for mundane/rational reasons. Thus they will be rigid and inflexible and may be disinclined to tolerate deviation from their plans. They may also punish subordinates who suggest or make changes, even for good reasons. Such an attitude will in turn discourage their subordinates from advocating or making any changes to present plans.⁷³¹ This attitude also becomes apparent in the usually authoritarian and highly centralized decision-making structure, where there is no scope for flexibility.

4. Final Estimation:

The importance of flexibility in the field to the AC cult leadership is expected to be low to medium. To the extent that AM leaders believe they have some special or divine dispensation or guidance, they may believe that whatever plans they themselves develop will be the most likely to lead to success. Thus they will be rigid and inflexible and may be disinclined to tolerate deviation from their plans, as well as to punish subordinates who suggest or are forced to make changes, even for good reasons. Such an attitude will in

⁷³⁰ "Yasuo Hiramatsu told me that Master Asahara denied his alleged role in the attack, and he assured me that "all our members still trust our Master." Yet, Hiramatsu confessed, he had his doubts. When I asked him directly if he thought that Asahara was guilty of having planned the gas attack, Hiramatsu said, "I don't know." [...] Yet "even if he did do it" the public affairs officer professed, this would not shake his faith or cause him to abandon his belief in Master Asahara and the Aum Shinrikyo movement. If the master was involved, Hiramatsu told me, he must have had "a religious reason." This view was shared by other members with whom I spoke..." Mark Juergensmeyer, *Terror in the Mind of God* (University of California Press, 2001), pp. 105-106. "Because he [Asahara] lived on a higher plane, however, he could see things that ordinary people could not see, and his actions were consistent with causal plane reality, not our own. For this reason anything Master Asahara might do that seemed to ordinary mortals as odd – even involvement in conspiracies to kill other people – could be explained as having its impetus and hence its justifications in a higher plane of reality. The killers and their victims were simply actors in a divine scenario. When Asahara was put in jail, Nakamura told me, the members of the movement regarded this incident like a scene in a play [...]" Mark Juergensmeyer, *Terror in the Mind of God* (University of California Press, 2001), pp. 105-106.

⁷³¹ "Decision-making within the cult [Aum Shinriki] was strictly hierarchical and enforced by punishments that could include death. Asahara, deemed the "Sacred Emperor" by his followers, held absolute power over the secret. In their indictments of Aum leaders, Japanese prosecutors have made clear their belief that orders for the production of nerve gas and other weapons came directly from Asahara. Top cult members also have testified in Japanese court that only Asahara had the power to order murder, and at one hearing Asahara himself reportedly offered "to shoulder responsibility for all incidents." Jonathan B. Tucker, *Toxic Terror*, p. 212.

turn discourage their subordinates from advocating or making any changes to preset plans.

5. Factor Weight:

The megalomaniacal nature of many AM leaders will generally make them more inflexible than the leaders of other types of groups in terms of being adaptable and allowing for changes to predetermined plans in the field.

6. How this factor might change in the next five years.

Based upon the actions taken by their adversaries, the need to delegate tasks to others, and changing conditions on the ground, AM leaders may be forced to adopt a more flexible attitude at times despite their natural inclinations.

D. The Leadership's Perception(s) of Previous Command and Control Outcomes

1. Previous Experience With Predetermined Command and Control:

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Failure:

None evident.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Success:

None evident.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in an Indeterminate Outcome:

Quoting Boyer, one could argue that the AM cult leaders would have the perception of an indeterminate effect of pre-determined command and control arrangements due to their religious beliefs: "[they] represent [only] a subset of that vast host of [garden-variety] believers. These are individuals who are *deeply preoccupied* with eschatology, who place it at the *center* of their theological speculations, and who teach that God at the beginning of time determined a *specific, detailed* plan for history's last days – a plan revealed in the Bible with minute particularity, though in symbolic language and veiled images. They are committed (sometimes obsessively so) to elucidating these prophetic mysteries and using them to illuminate and explain the course of contemporary history."⁷³²

2. Previous Experience with Assertive Command and Control:

Arguments for Leadership Perceptions that Assertive C&C Resulted in Failure:

None evident.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Success:

The leadership's perception of previous assertive command and control arrangements that have resulted in success can be exemplified with Japanese AM cults. Aum developed a self-identity as a Buddhist movement with hierarchic elitism and Asahara's teachings were specifically influenced by the Vajrayana esoteric path for universal world salvation.⁷³³ Absolute devotion to an enlightened teacher, who is able to attain levels of spiritual awakening and ascendancy above ordinary people, is necessary for intense spiritual advancement. Hence, Aum Shinrikyo began to turn into an elitist movement with a strict structure of ranks. In August 1988, Asahara delivered a sermon, which was the first of a series of courses delivered between 1988 and 1994 and eventually collated into 'The Vajrayana Course Teaching System Textbook.'⁷³⁴ The Vajrayana sermon is a historical source that shows the development of Asahara's thought and his mental state, but the documents were not made available outside of Aum's inner circles. The later sermons, which were delivered at the same time with Aum's chemical weapons program, were dominated by extremely pessimistic thoughts, obsession with apocalyptic images with the means of mass destruction, prophecies of the coming war with futuristic weaponry, and concerns about the conspiratorial forces seeking to destroy his

⁷³² Paul Boyer, *When Time Shall Be No More: Prophecy and Belief in Modern American Culture* (Cambridge, MA: Belknap Press of Harvard University, 1992), pp. ix-x.

⁷³³ Ian Reader, *Religious Violence in Contemporary Japan: The Case of Aum Shinrikyo* (Hawaii: University of Hawaii, 2000), pp. 88-89.

⁷³⁴ Ian Reader, *Religious Violence in Contemporary Japan*, p. 128.

movement.⁷³⁵ Absolute devotion to the guru was essential and Asahara was the sole source of power in Aum, determining whether a disciple would be killed to perform an act of salvation.⁷³⁶

The 1970's terrorist group JRA (Japanese Red Army) is well known for its deadly attacks throughout the world. A small organization (only six hard core members and 30-40 total at its peak), the group was well funded and effective. Although JRA espoused anti-imperialist ideology against the Japanese monarchy at home, it identified with the Palestinian liberation effort and even allied itself with the PFLP (Popular Front for the Liberation of Palestine). Conducting attacks across the globe and associating with various terrorist organizations, it is not surprising that the group shared a similar organizational structure with various ethno-nationalist and radical leftist organizations operating at this time. The JRA adopted a command and control structure influenced by revolutionary theory and conformed to a very organized, hierarchical structure. Having been established in the wake of JRA's success, it is conceivable that Aum's assertive command and control would be based on JRA's similar structure. Furthermore, the high degree of social control characteristic of cults supports an assertive structure that gives the charismatic leader extensive and manipulative control over subordinates. Furthermore, world transformative ideology and an abundance of resources are shared between the two Japanese groups and it is understandable that Aum mirrored its command and control structure on JRA's out of appreciation for similar organizational characteristics.

Arguments for Leadership Perceptions that Assertive C&C Resulted in an Indeterminate Outcome:

Although in antiquity it was commonly believed that a cataclysmic destructive process was to be carried out exclusively by, or at least in conjunction with, supernatural entities, similar themes later appeared in secularized versions which envisioned that "righteous" humans with special destinies, insights, or abilities would alone act to destroy that unjust, reprehensible world and its "evil" masters.⁷³⁷

3. Previous Experience with Delegative Command and Control:

Arguments for Leadership Perceptions that Delegative C&C Resulted in Failure:

None.

Arguments for Leadership Perceptions that Delegative C&C Resulted in Success:

None.

Arguments for Leadership Perceptions that Delegative C&C Resulted in an Indeterminate Outcome:

None.

4. Leadership Perception of Outcomes Based on Command and Control Arrangement Type

Predetermined Final Estimation:

None.

Assertive Final Estimation:

Given the authoritarian nature of AM cults, the leadership's perception of the assertive command and control arrangements would result in success.

⁷³⁵ Ibid.

⁷³⁶ Ibid, 146.

⁷³⁷ Cf., e.g., Robert Ellwood, "Nazism as a Millennialist Movement," in Catherine Wessinger, ed., *Millennialism, Persecution, and Violence*, pp. 241-60; Richard C. Salter, "Time, Authority, and Ethics in the Khmer Rouge: Elements of the Millennial Vision in Year Zero," in Ibid, pp. 281-98; Philip Lamy, "Secularizing the Millennium: Survivalists, Militias, and the New World Order," in Thomas Robbins and Susan J. Palmer, eds., *Millennium, Messiahs, and Mayhem: Contemporary Apocalyptic Movements* (New York: Routledge, 1997), pp. 93-118; Martha F. Lee, "Environmental Apocalypse: The Millennial Ideology of Earth First!," in Ibid, pp. 119-37; and Ted Daniels, ed., *A Doomsday Reader: Prophets, Predictors, and Hucksters of Salvation* (New York: New York University, 1999), Part 1 on "Enlightenment and Secular Millenarianism." For an interesting recent historical overview of diverse views on the afterlife, see John Casey, *After Lives: A Guide to Heaven, Hell, and Purgatory* (New York: Oxford University, 2009).

Delegative Final Estimation:

N/A

5. Factor Weight:

No. Since there are only a handful of cases in which AM groups have employed CBRN materials, there is very little evidence that might help AM leaders assess the relative success or failure of adopting pre-determined, assertive, or delegative approaches to C&C in this context. Unless the AM leader is an expert on radiological or nuclear weapons, however, he will probably be forced to delegate technical responsibilities to subordinates with some expertise in those areas. The same is true with respect to specific operational matters, i.e., the actual mechanics of launching an attack, which might require delegation to those with more military training and experience.

6. How this factor might change in the next five years.

If other groups carry out RN attacks within the next five years, more information about what works or does not work may become available to the leaders of AM groups contemplating such attacks.

E. The Leadership's Perception: Complexity of Getting a Working Weapon to the Target (U.S.)

1. Arguments for Perception of High Complexity:

As a general rule, it is likely that VNSAs of all types, including apocalyptic millenarian groups, would first make a decision to try to acquire RN materials for possible use in an attack on designated enemies. Only if they were able to do so would they then begin to identify possible targets to attack. And once they selected a specific target, they would then begin planning the operational details. Of course, it may be that such a group might have already identified a number of practical or symbolic targets that they hoped to be able to attack using conventional weapons, i.e., before even contemplating the acquisition or employment of RN weapons. In such a case, should the group suddenly be in a position to acquire RN materials, those same targets could then conceivably be attacked with these new types of weapons rather than automatic weapons or conventional explosives.

Based on Aum Shinrikyo's experiments with biological agents, it is clear that Aum had serious problems with the effective weaponization of *clostridium botulinum* and *bacillus anthracis*, which is the causative agent of anthrax.⁷³⁸ In a series of attempts in Yokohama, Narita, and Tokyo, Aum utilized non-virulent strains typically used in vaccinations which have little possibility to harm human beings, and they had unsophisticated delivery apparatuses.⁷³⁹ It is possible that Aum had obtained the agents "in small quantities from culture collections under the guise of research."⁷⁴⁰ Aum's biological weapon attacks failed as they couldn't produce the agents in powder form and the liquid suspension used wasn't pure enough.⁷⁴¹

A group that was relatively small and impoverished would not realistically consider acquiring, handling, or deploying nuclear weapons, except in the most unusual circumstances (e.g., if a member had inside access to a facility where such weapons were stored). A large, wealthy apocalyptic millenarian group with some highly-trained scientific personnel and with organizational branches in numerous countries – like Aum, the

⁷³⁸ David E. Kaplan, "Aum Shinrikyo (1995)," in Jonathan B. Tucker, ed., *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge, MA: MIT Press, 2000), p. 221.

⁷³⁹ Centers for Disease Control and Prevention, "Anthrax Sterne Strain (34F2) of *Bacillus Anthracis*," (2009), Available at http://www.cdc.gov/nczved/divisions/dfbmd/diseases/anthrax_sterne; and Paul Keim, Kimothy L. Smith, Christine Keys, Hiroshi Takahashi, Takeshi Kurata, and Arnold Kaufmann, "Molecular Investigation of the Aum Shinrikyo Anthrax Release in Kameido, Japan", *Journal of Clinical Microbiology*, Vol. 39 Issue. 12 (December, 2001), pp. 4566–4567.

⁷⁴⁰ Richard Danzig, Marc Sageman, Terrance Leighton, Lloyd Hough, Hidemi Yuki, Rui Kotani and Zachary M. Hosfor, "Aum Shinrikyo Insights Into How Terrorists Develop Biological and Chemical Weapons," *Center for a New American Security*, (July 2011), p. 16. Available at: http://www.cnas.org/files/documents/publications/CNAS_AumShinrikyo_Danzig_1.pdf.

⁷⁴¹ Paul Keim, Kimothy L. Smith, Christine Keys, Hiroshi Takahashi, Takeshi Kurata, and Arnold Kaufmann, "Molecular Investigation of the Aum Shinrikyo Anthrax Release in Kameido, Japan," *Journal of Clinical Microbiology*, Vol. 39, Issue 12 (December, 2001), pp. 4566–4567.

Raëlians, or the Church of Scientology – could conceivably contemplate fabricating or acquiring a nuclear weapon for use in an attack. Note, however, that despite their relative wealth and international presence, it appears extremely unlikely that either the Raëlians or the COS would ever contemplate acquiring and using nuclear weapons to attack their enemies. In contrast, one could easily imagine some of the thousands of cult-like Japanese “new religions,” especially certain ultranationalist Nichiren Buddhist sects, fantasizing about carrying out nuclear attacks. But a small, localized, and relatively destitute group could at best hope to construct and deploy a crude radiological dispersal device (RDD).

2. Arguments for Perception of Medium Complexity:

The Raëlian Church is a strong physicalist belief system that was the first organization to create a religious rationale for cloning to undergo “elohimization,” named after the alien Elohim who was the primate ancestor of humans.⁷⁴² According to Raëlians, there is no scientific or technical problem insurmountable for human genius as long as human genius is in command. If the Raëlians could set up a world government of geniuses, then the danger of a nuclear holocaust would be averted: “The faster you place geniocracy [a perfect society based on the rule of geniuses] in power the faster you will suppress the risk of cataclysm,” for a being with a deficient brain can threaten world-wide peace.”⁷⁴³ [The Raëlians abandoned this aim during the 80s, because of increasing government opposition and therefore Raël decided not to get involved in costly conflicts with opponents. Though generally speaking, this attitude may parallel groups with highly physicist ideologies.] “There [at the Awakening seminar in Eden] they cultivate sensory awareness in a nudist society he visited on the planet of the Elohim. He advocates free love and cloning, and imparts to them an inspiring vision of the limitless potential of the human being.”⁷⁴⁴

3. Arguments for Perception of Low Complexity:

The lower the complexity of the planned attack, the more easily it could be carried out by AM groups with fewer resources and less skilled personnel.

4. Final Estimation:

The AC cult leadership would be expected to have a high perceived complexity of getting the RN weapon to the target, based on the experience of VNSA’s difficulty in weaponizing the agents.

5. How this factor might change in the next five years.

If a group were to recruit more highly trained personnel in the interim, its ability to carry out a more sophisticated RN attack would presumably increase.

F. Leadership’s Perception of the Trustworthiness of Relevant Group Members

1. Arguments for Perception of High Trustworthiness:

Although the fashion of traditional secret societies has only rarely been adopted by modern New Religious Movements (NRMs), cult-like or otherwise, certain features of such arrangements have not infrequently been borrowed by clandestine political or criminal groups, including some with AM ideologies. The distinguishing feature of secret society structures is they have both a vertical or hierarchical and a horizontal or inner-outer dimension. On the one hand, dedicated members who pass various pre-established “tests” of loyalty or competence tend to gradually ascend in the organizational hierarchy until they reach higher levels, but at the same time they tend to pass from the outer circles of the organization through successive onion-like layers until they are admitted into the inner core of the group. As they rise in the hierarchy and penetrate the inner circles, they become privy to more and more secrets, whether about the aims, the doctrines, the rituals, the structure, the membership, or the activities of the organization. Hence, the members of the group are taught to withdraw from the contemporary world into the commune to perform asceticism under the guru for spiritual development.

⁷⁴² “Understanding UFO Religions,” in Christopher Partridge eds., *UFO Religions* (London: Routledge, 2003), p. 26.

⁷⁴³ Susan Palmer, *Aliens Adored*, p. 86.

⁷⁴⁴ Susan Palmer, *Aliens Adored*, p. 93.

Apart from the adoption of active apocalyptic millenarian worldviews, several other factors might facilitate a religious or political group's adoption of violence against external "evildoers" and/or their actual ability to carry out such violence, with or without the use of RN materials and weapons. One is the fact that many apocalyptic millenarian groups are headed by charismatic leaders who, almost by definition, have an unusual ability to captivate the imaginations and influence the actions of their followers. Another is that many such groups systematically employ an array of deceptive and coercive measures in order to recruit, psychologically enmesh, indoctrinate, manipulate, and ultimately control the thoughts and actions of their followers, in part by undermining their psychological autonomy and their ability to engage in independent thinking. Groups employing such techniques have often been referred to as 'cults.' Members of the cults enter a highly regimented lifestyle and are not allowed personal freedom or independent thinking, which is replaced by "crew-mindedness."⁷⁴⁵

A bitter controversy has arisen over charges that certain cults have employed "mind control" techniques and effectively "brainwashed" their members and adherents. In recent years academic "cult apologists" have repeatedly (and often disingenuously) sought to banish the term "brainwashing" from scholarly discourse by undermining the legitimacy of the entire concept, either by attacking straw men (e.g., untenable journalistic caricatures of the process, such as allegations of total "mind control," that no serious scholar has ever accepted) or by claiming that the early models developed by social scientists in connection with civilians in communist countries or Allied POWs held by the Chinese during the Korean War were inapplicable in the context of NRMs, since the latter's social control mechanisms supposedly did not include physical imprisonment or coercion. Aside from the fact that a number of cult-like groups *have* employed physical coercion – up to and including murder – and/or forcible confinement in an effort to control recalcitrant followers, the available evidence indicates a complex array of manipulative psychological practices, and that if these practices are employed consciously and systematically there is no reason why they cannot be labeled as "brainwashing" or something else, at least provided that scholars carefully delimit the meaning of the terms they employ.⁷⁴⁶

An illustration can be found in Aum's perception of the master: "Because he lived in a higher plane, however, he could see things that ordinary people could not see, and his actions were consistent with causal plane reality, not our own. For this reason anything Master Asahara might do that seemed to ordinary mortals as odd – even involvement in conspiracies to kill other people – could be explained as having its impetus and hence its justifications in a higher plane of reality. The killers and their victims were simply actors in a divine scenario. When Asahara was put in jail, Nakamura [a former member of Aum Shinrikiō] told me, the members of the movement regarded this incident like a scene in a play: Asahara was playing the role of prisoner, following a script of which they were unaware, for a purpose that only he knew."⁷⁴⁷

A fair effort to clarify the meaning of the concept has recently been made by Benjamin Zablocki, one of the first social scientists to carry out extensive fieldwork on non-mainstream religious and social groups. According to Zablocki, "brainwashing is to be understood as nothing more than an orchestrated process of ideological conversion that takes its subjects through a well-defined sequence of social psychological stages...the brainwashing conjecture does not assert that subjects are robbed of their will...[but rather that] resocialization remaps the values and preferences of the subject so that the subject voluntarily chooses to do what the group wants him to do. The goal of brainwashing is to create deployable agents ... There is

⁷⁴⁵ Robert W. Balch, "Waiting for the Ships: Disillusionment and the Revitalization of Faith in Bo and Peep's UFO Cult," in James R. Lewis, *The Gods Have Landed: New Religions from Other Worlds* (Albany, NY: State University of New York Press, 1995), p. 160.

⁷⁴⁶ Indeed, Schein and other investigators emphasized from the outset that, contrary to popular images such as those later depicted in the brilliant 1962 film *The Manchurian Candidate*, the Chinese communists had *not* developed any terrifying new methods of controlling behavior, but had instead simply combined a number of traditional and well-known techniques designed to weaken prisoner resistance, including interrogation, physical torture, organized group discussions, ritual self-criticism, the use of rewards and punishments, forced confessions, ideological indoctrination, and information control. See: Edgar Schein, "The Chinese Indoctrination Program for Prisoners of War: A Study of Attempted Brainwashing," *Psychiatry*, Vol. 19, Issue 2 (1956), pp. 149-72.

⁷⁴⁷ Mark Juergensmeyer, *Terror in the Mind of God* (2001), p. 116.

nothing in the definition to imply that brainwashing is easy to accomplish, always effective, or impossible to resist ... [On the contrary,] *brainwashing is likely to always remain a relatively rare phenomenon because of the difficulty of achieving a high degree of milieu control and charismatic influence necessary to make it effective* [emphasis added].⁷⁴⁸ Compare the views of Kathleen Taylor, who has argued that “brainwashing is an extreme form of social influence which uses mechanisms increasingly studied and understood by social psychologists, [even though] such influence can vary hugely in its intensity” and effects.⁷⁴⁹ Later, she rightly emphasizes that it was more than just the systematic application of “a set of [identifiable] techniques” because it was both designed to “refashion [the subjects’] very identities” and inspired by “a dream, a vision of [attaining] ultimate control over not only behavior but thought as well.”⁷⁵⁰ Even so, in most of the NRM scholarship published between 1987 and the present day, it has become politically correct to “defend NRMs and to attack those who argued that some NRM members may have been brainwashed.”⁷⁵¹

Some would go even further than Zablocki and argue that “brainwashing” involves a systematic effort to break down key features of an individual’s personality structure. Indeed, one of the most interesting analyses of “thought reform” in relation to cults has made a useful distinction between social control organizations that attack *central* elements of the self and those that only attack *peripheral* elements of the self. Obviously, the former are capable of causing far more psychological damage, both in the short term and in the long term.⁷⁵² Nevertheless, given the imprecise and alarmist nature of terms like “mind control” and “brainwashing,” and the fact these terms have so often been sensationalized or applied inaccurately or propagandistically by those who are seeking to attract readers or promote certain agendas, it is perhaps preferable to employ the less emotion-laden term “coercive persuasion” to the well-documented social control processes employed by a variety of bona fide cult-type groups. Even those who are justifiably critical of the all-encompassing, sensationalized concepts of “mind control” and “brainwashing” have acknowledged that “there are techniques that can be used to assault the brain, to try forcibly to coerce people into reversing their beliefs” and that “[m]any of these techniques were indeed used in Korea and are still applied, to some extent, by religious organizations today.”⁷⁵³

2. Arguments for Perception of Medium Trustworthiness:

Charismatic AM leaders are viewed by their followers as being very special and important if not unique human beings. For this very reason, they are able to exert an extraordinary degree of influence over those

⁷⁴⁸ Benjamin Zablocki, “The Blacklisting of a Concept: The Strange History of the Brainwashing Conjecture in the Sociology of Religion,” *Nova Religio*, Vol.1, Issue 1 (October, 1997), pp. 102-5.

⁷⁴⁹ Kathleen Taylor, *Brainwashing: The Science of Thought Control* (New York: Oxford University, 2004), pp. 3-4.

⁷⁵⁰ Ibid, pp. 8- 9. This means, effectively, that the persistent application of these techniques is essentially a manifestation of totalitarianism, whether they are used on individuals, within the confines of small groups, or on a societal level. For an extraordinary example of the latter, see Martin King Whyte, *Small Groups and Political Rituals in China* (Berkeley: University of California, 1983).

⁷⁵¹ Benjamin Zablocki, “The Blacklisting of a Concept,” p. 108.

⁷⁵² Richard Ofshe and Margaret Singer, “Attacks on Peripheral versus Central Elements of the Self and the Impact of Coercive Persuasion,” *Cultic Studies Journal*, Vol. 3, Issue 1(1986), pp. 3-24. It should be pointed out that for several years the author of this report served, while still a graduate student at the University of California at Berkeley, as the teaching assistant for a course on thought reform and cults that was offered by Ofshe. Compare also, Philip Zimbardo and Susan Anderson, “Understanding Mind Control: Exotic and Mundane Mental Manipulations,” in Michael D. Langone, ed., *Recovery from Cults: Help for Victims of Psychological and Spiritual Abuse* (New York: W. W. Norton & Company, Inc., 1993), pp. 104-125.

⁷⁵³ Dominic Streatfeild, *Brainwash: The Secret History of Mind Control* (New York: St. Martin’s, 2007), p. 347. (Alas, Streatfeild should have added both sectarian political groups and psychotherapy groups to the last sentence rather than limiting his remarks to “religious groups.”) See further, Robert Jay Lifton, *Thought Reform and the Psychology of Totalism* (University of North Carolina Press, 1989), esp. pp. 4-5: “Behind this web of semantic (and more than semantic) confusion lies an image of ‘brainwashing’ as an all-powerful, irresistible, unfathomable, and magical method of achieving total control over the human mind. It is of course none of these things....[However,] the official Chinese Communist program of *szu-hsiang kai-tsao* (‘ideological remodeling,’ ‘ideological reform,’ or as we shall refer to it here, ‘thought reform’) has in fact emerged as one of the most powerful efforts at human manipulation ever undertaken.”

followers.⁷⁵⁴ Some observers have rightly noted that the charismatic qualities of these very leaders helped induce many members of their groups to carry out actions that, under normal circumstances, would have never occurred or been repugnant to them. Indeed, one of the most common images of groups characterized as cults is their charismatic leaders. Alas, the reality is not nearly so simple and straightforward. For one thing, even in relatively small millenarian cults headed by megalomaniacal charismatic figures, those leaders usually come to rely upon a small cadre of loyal followers to whom various essential tasks are increasingly delegated (at least until such time as those loyalists fall out of favor with the leader). This was true, for example, within the Branch Davidian compound and at Jonestown. For another, charismatic leaders often seek either to facilitate their continued control or ensure the long-term survival of the group they have founded by intentionally establishing more complex institutional structures, structures which can then hopefully continue to operate even after they die. This was clearly the pattern for the COS, the UC, and the Rajneeshees. Nevertheless, the death of the charismatic founder or leader of cult-like groups, apocalyptic millenarian or otherwise, often leads to internal power struggles between would-be successors, if not to outright organizational schisms.⁷⁵⁵

Over time, many apocalyptic millenarian groups have developed an increasingly elaborate and hierarchical bureaucratic structure ruled in an authoritarian fashion and governed by rigid rules and regulations.

Outside of totalitarian societies and prisons, where the highest degrees of authoritarian milieu control are possible, very few small-scale social organizations are able to achieve sufficient levels of milieu control and charismatic influence to successfully engage in “coercive persuasion.” Among those that actually have the capacity to do so are communal religious, political, or psychotherapeutic groups with authoritarian charismatic leaders, especially those which espouse apocalyptic, world-transformative ideologies and whose headquarters or compounds are geographically isolated. Hence the term “cult” can be justly defined as any micro-social organization characterized by noticeably authoritarian, deceptive, manipulative, coercive, exploitative, abusive, and/or violent social control mechanisms. In effect, cults are *totalitarian mini-societies that aim to exert complete control over their followers*, not only over the external behavior and daily activities of those followers but also over their consciences, their mental attitudes, and their internal thought processes.⁷⁵⁶ It is important to note, however, that even though total control can never actually be achieved within a given micro-social group, much less over an entire society, the mark of totalitarianism is the leader’s aspiration and effort to exert such a complete level of control, not whether he or she succeeds fully. Once it is recognized that the term “cult,” when defined in this delimited way, can be applied to all types of organizations with these sorts of observable, documented characteristics – whether they are political, religious, psychotherapeutic, or hybrid groups⁷⁵⁷ – it may at long last be possible to decouple the analysis of

⁷⁵⁴ For some interesting thoughts on the intrinsically authoritarian nature of these “guru”-follower relations, see Joel Kramer and Diana Alstad, *The Guru Papers: Masks of Authoritarian Power* (Berkeley: Frog, Ltd., 1993), esp. Part 1.

⁷⁵⁵ For several illustrative examples, see the case studies in James R. Lewis and Sarah M. Lewis, eds., *Sacred Schisms: How Religions Divide* (Cambridge, UK and New York: Cambridge University, 2009), esp. chapters 8 (on the Church Universal and Triumphant [CUT]), and 12 (on the International Society for Krishna Consciousness [ISKCON]). Such groups may suffer defections and schisms even prior to the deaths of their charismatic leaders, as in the case of the UC and the Church of Satan. See respectively *ibid*, chapters 6 and 9.

⁷⁵⁶ See, in a different context, Jeffrey M. Bale, “Islamism and Totalitarianism,” *Totalitarian Movements and Political Religions*, Vol. 10, Issue 2 (June 2009), p. 83.

⁷⁵⁷ For examples of political cults, of which there are many, cf. the insider accounts of Janja Lalich, *Bounded Choice: True Believers and Charismatic Cults* (Berkeley: University of California, 2004); and Alexandra Stein, *Inside Out: A Memoir of Entering and Breaking Out of a Minneapolis Political Cult* (St. Cloud, MN: North Star Press, 2002), both of which deal with sectarian Marxist-Leninist groups. For an example of a hybrid psychotherapy-political cult, see Amy B. Siskind, *The Sullivan Institute/Fourth Wall Community: The Relationship of Radical Individualism and Authoritarianism* (Westport, CT and London: Praeger, 2003). For two high profile examples of therapeutic “self-improvement” groups that have been accused of having cult-like characteristics, cf. Steven Pressman, *Outrageous Betrayal: The Real Story of Werner Erhard from est to Exile* (New York: St. Martin’s, 1993), a critical exposé of Erhard himself (né John Paul Rosenberg) and his aggressive two-weekend Erhard Seminars Training (est) courses; and Aneline Marie Powers, *Silva Mind Control: An Anthropological Investigation* (New York: Garland Publishing, 1992), which examines the Silva Mind Control (now Silva Method) courses. Also, certain “alcohol rehabilitation” and “drug rehabilitation” organizations have developed noticeable cult-like characteristics, in particular Synanon. See further Rod Janzen, *The Rise and Fall of*

such groups from the increasingly sterile and largely irrelevant debates over religious freedom. Moreover, contrary to oft-stated claims, the term “cult” is not only applicable to unconventional, alternative, countercultural, or otherwise non-mainstream political, religious, and psychotherapy groups, since organizations that espouse relatively mainstream, pro-establishment political views or quite orthodox theological interpretations can also exhibit similarly deceptive and/or coercive internal social control mechanisms.⁷⁵⁸ A “religious cult” can therefore be defined, in the strict sense of the term, as any type of religious group that systematically employs these well-known techniques of coercive persuasion, irrespective of the precise nature of its theological doctrines or rituals. It should not be applied exclusively to “NRMs,” however that term is defined.

AM leaders will occasionally place a special degree of trust in a few very close associates who have devotedly followed them over a period of many years (unless they suspect that such people might eventually threaten their own authority). It is mainly to these demonstrably loyal and dedicated individuals that sensitive operations may be voluntarily delegated, even if reluctantly. Sometimes this may be done so that, if things go south, the leader can maintain plausible deniability. There are also cases in which a group of lieutenants allegedly planned acts of violence without the approval of the group’s leader, as Ma Anand Sheela and her cohorts (including Ma Anand Puja) allegedly did at Rajneeshpuram.⁷⁵⁹ This is not entirely certain, since the Bhagwan may have actually ordered them to carry out certain illicit and sinister actions, and then later sought to avoid any legal responsibility by accusing his subordinates of acting on their own initiative.

3. Arguments for Perception of Low Trustworthiness:

AM leaders tend not to have high levels of trust in the members of their own groups. They often do not even trust their chief subordinates, although the latter are regarded as being more trustworthy than garden variety group members. This attitude derives from the arrogance and inflated sense of importance characteristic of the leaders of such groups, and their corresponding inclination to underestimate the abilities and loyalty of others.

AM leaders could conceivably be forced to rely – if only by default – on individuals with highly-specialized

Synanon: A California Utopia (Baltimore: Johns Hopkins University, 2001), an overly sympathetic analysis which downplays the group’s increasing authoritarianism and violence; David Gerstel, *Paradise, Incorporated: Synanon* (San Francisco: Presidio Press, 1983), a good journalistic investigation; Dave Mitchell, Cathy Mitchell, and Richard Ofshe, *The Light on Synanon: How a Country Weekly Exposed a Corporate Cult – and Won the Pulitzer Prize* (New York: Seaview Books, 1980); and the insider account by William Olin, *Escape from Utopia: My Ten Years in Synanon* (Santa Cruz, CA: Unity Press, 1980).

⁷⁵⁸ One example might be Opus Dei (The Work of God), the lay conservative Catholic organization established in 1928 by José María Escrivá de Balaguer (1902-1975), whose members have formed an integral part of the Spanish political establishment, church hierarchy, and economic elite for decades, especially during and after the era of the Francisco Franco dictatorship. Although it is difficult to find balanced treatments, pro or con, of the organization, Opus Dei has long been criticized for its cult-like internal social control mechanisms by a wide array of people, including radical Falangists, leftists, liberals, and a host of former members. For a good example of the latter type of exposé, see María del Carmen Tapia, *Inside Opus Dei: The True, Unfinished Story* (New York: Continuum, 2006). For more on Opus Dei, cf. Opus’ own publications, such as José María Escrivá de Balaguer, *The Way: The Essential Classic of Opus Dei’s Founder* (New York: Doubleday, 1982 [1939]) [a translation of *Camino*], and those of its less critical observers, such as, John L. Allen, Jr., *Opus Dei: An Objective Look Behind the Myths and Reality of the Most Controversial Force in the Catholic Church* (New York: Doubleday, 2007), with more critical and/or scholarly studies, such as Jesús Ynfante, *La prodigiosa aventura del Opus Dei: Genesis y desarrollo de la santa mafia* (Paris: Ruedo Ibérico, 1970); Daniel Artigues, *El Opus Dei en España: Su evolución ideológica y política* (Paris: Ruedo Ibérico, 1971); José V. Casanova, “The Opus Dei Ethic, the Technocrats and the Modernization of Spain,” *Social Science Information*, Vol. 22, Issue 1 (1983), pp. 27-50; Henry Kamm, “The Secret World of Opus Dei,” *New York Times Magazine*, 8 January 1984, pp. 38ff; Giancarlo Rocca, *L’Opus Dei: Appunti e documenti per una storia* (Rome: Paoline, 1985); and Michael Walsh, *Opus Dei: An Investigation into the Powerful, Secretive Society within the Catholic Church* (New York: Harper Collins, 2004).

⁷⁵⁹ Cf. Lewis F. Carter, *Charisma and Control in Rajneeshpuram* (New York: Cambridge University Press, 1990), pp. 229-31; and, Win McCormack, ed., *The Rajneesh Chronicle: The True Story of the Cult that Unleashed the First Act of Bioterrorism on US Soil* (Tin House Books, 2010), pp. 226-30.

scientific, technical, or operational skills if they are contemplating carrying out an RN attack. A few such people might even be paid outsiders rather than presumably loyal, actual group members. But even if the leaders have faith in these peoples' abilities, they are unlikely to have complete faith in their loyalty and obedience. An illustration of the Aum leadership's perception of low trustworthiness can be found in their members' testimonies: "The appearance of the Master during the initiation ceremony, therefore was more than the high point of the event: it was the event. Nakamura said that Asahara appeared to be practically blind, though he thought he might have been able to see slightly through one eye. His attitude was serious, even angry, and Nakamura felt he was judging each of them personally. [Nakamura, a former member of Aum Shinrikyo] became embroiled in a dispute with the local director. Nakamura wanted to help beautify the place but was told that he was not yet religious enough to help with such matters. Nakamura felt that he was not respected by the director, and the next day he decided to leave. He had joined the movement because he lacked a sense of worth, and it had given him a feeling of self-confidence. He was not going to sacrifice that to play what he regarded as a humiliating role, he said. So he left."⁷⁶⁰

In cases where central authority has broken down, however temporarily, particular geographic or functional leaders within the group may order their followers to initiate acts of violence on their own initiative without the knowledge or approval of other factional leaders. One example of this would be the ISKCON murders reportedly ordered by Kirtanananda Swami, at that time head of the organization's New Vrindabin community.⁷⁶¹

4. Final Estimation:

AM cult leadership is expected to have a low to possibly medium level of trustworthiness of the relevant personnel. However, this is highly contextual.

5. Factor Weight:

Yes. Due to their personality traits, AM leaders are unlikely to have high levels of trust in other people, but may be forced to rely on their expertise in order to carry out a successful RN attack.

6. How this factor might change in the next five years.

In theory, one could imagine AM leaders developing higher levels of trust in certain group members over time, so much so that they would be willing to delegate more and more responsibility to them.

G. The Leadership's Perception of the Reliability and Security of Communications

1. Arguments for Perception of High Reliability and Security:

None.

2. Arguments for Perception of Medium Reliability and Security:

None.

3. Arguments for Perception of Low Reliability and Security:

AM cults are dominated by paranoia and conspiracy theories. In the Aum case, Asahara stated in various sermons that the movement was surrounded by conspirators intending to destroy them and was infiltrated by spies.⁷⁶² The paranoid siege mentality led to viewing defecting members as spies seeking to spread news of Aum's illegal activities, such as the manufacturing of weapons of mass destruction. By 1994, Aum's leadership group was interrogating and using truth drugs on suspected traitorous members.⁷⁶³ The climate

⁷⁶⁰ Mark Juergensmeyer, *Terror in the Mind of God*, p. 112

⁷⁶¹ For the case of Kirtananda within the larger context of various ISKCON schisms following founder Prabhupada's death, see E. Burke Jr. Rochford, "Succession, Religious Switching, and Schism in the Hare Krishna Movement," in James R. Lewis and Sarah M. Lewis, eds., *Sacred Schisms: How Religions Divide* (New York: Cambridge University Press, 2009), p. 267.

⁷⁶² Ian Reader, *Religious Violence in Contemporary Japan: The Case of Aum Shinrikyo* (Hawaii: Hawaii University Press, 2000) p. 11.

⁷⁶³ Ian Reader, *Religious Violence in Contemporary Japan*, p. 12.

of fear and suspicion paved the way to internal violence and disorganization, and resulted in an escalation of aggression, punishment, and physical intimidation.

4. Final Estimation:

Low level of perceived reliability and security of communications is expected. The high level of paranoia, perceived external threats to the group, and fear of internal collapse decrease the reliability of communication. AM cults don't have sophisticated communication networks in order to avoid leaks and to be able to maintain the control in the hands of the leader.

5. Factor Weight:

No. There is nothing peculiar about AM organization leaders that would make them more or less concerned about the reliability and security of communications than other types of group leaders.

6. How this factor might change in the next five years.

If such a leader encountered problems in this area in some other context, he or she might become more concerned about secure communications in the context of a planned RN attack.

H. The Leadership's Perception of Group Competency

1. Arguments for Perception of High Competency:

It is possible that individual scientists affiliated with such a group might have outside jobs in respected scientific research agencies or facilities, which would offer them access to even more potentially dangerous information, all the more so if they had classified security clearances. It is also conceivable that members of certain apocalyptic groups could successfully recruit scientists "in place," thus giving them access to inside information and perhaps even dangerous RN materials. The type of operational attack teams deployed would be largely dependent upon the overall operational capabilities of particular apocalyptic millenarian groups. As with other VNSAs, this would in turn be related to how many of their members were educated, had military or intelligence backgrounds, or possessed scientific training.

For instance, Aum was greatly assisted in its weapon program by the large number of young scientists and technicians that flocked to the cult from Japan's top universities in medicine, biochemistry, biology, and electrical engineering. The sect prioritized recruitment of such followers, believing that their skills were needed to survive Armageddon. Aum reportedly sought out those with backgrounds in physics, chemistry and biology in Russia as well.⁷⁶⁴

A large portion of Aum's militarization and chemical and biological programs can be explained by the guru's grandiose assumption that "his cult could become a great power capable of initiating, controlling, and surviving a world war."⁷⁶⁵

The numbers and expertise of attack teams would be related to the hardness of the targets selected for attack and the nature of the weapon used in that attack. Clearly, "soft" targets would be easier to attack than "hard" targets, and attacks using cruder weapons would be easier to carry out than attacks using more sophisticated weapons. In that sense, the composition of the attack teams would be in large part target- and weapon-specific.

2. Arguments for Perception of Medium Competency:

Although many NRMs and cults try their best to recruit relatively educated and wealthy members, only the more sophisticated of these groups manage to recruit disproportionately from university students and skilled professionals. For example, there is surely a difference between the membership of groups like the COS, the Raëlians, the OTS, Aum, and the UC, which tend to attract individuals with a higher educational and

⁷⁶⁴ Jonathan B. Tucker, *Toxic Terror*, pp. 212-213.

⁷⁶⁵ Robert Jay Lifton, "Ultimate Weapons, Ultimate Attraction," in *Destroying the World to Save it: Aum Shinrikyo, Apocalyptic Violence, and the New Global Terrorism* (New York: Holt, 1999), p. 189.

social-economic status (SES), and groups like the Peoples Temple, the Yahweh cult, the Branch Davidians, or apocalyptic Christian Identity compound groups like the Covenant, the Sword, and the Arm of the Lord (CSA), which tend to appeal more to the less educated and, in general, to those from lower social strata.⁷⁶⁶

This in turn generally impinges upon their resulting operational capabilities. The one exception is that certain less wealthy or high-brow groups may contain disproportionate numbers of military veterans, who could conceivably significantly augment their operational capabilities.

3. Arguments for Perception of Low Competency:

AM leaders are likely to entertain doubts about the competency of group members (and, even more, of outsiders who may be contracted to perform certain tasks), if only because they have an inflated sense of self-importance and a corresponding degree of contempt for others. Yet in the RN context circumstances could compel them to rely on others to perform certain high-level technical tasks that they are incapable of performing themselves.

The less complicated the technical and logistical factors involved in launching an attack, including an RN attack, the more confidence AM leaders would likely have that their operatives could successfully carry it out.

4. Final Estimation:

The leadership is expected to have the perception of a high level of group competency, based on the educational and the professional background of the recruits. AC cult leaders' megalomania impacts their perception of the group's capabilities and triggers military extension as they would fantasize about new weapons systems, as in the case of Aum's leader Asahara.⁷⁶⁷

5. Factor Weight:

Yes. Most AM cults are centered on recruiting the well-educated and wealthy in order to enhance the competency of their followers.

6. How this factor might change in the next five years.

If AM leaders see that certain of their subordinates are able to carry out various activities successfully, their confidence in those subordinates is likely to grow over time. If they fail to perform tasks successfully, the leader's confidence in them will naturally decline.

I. Leadership's Perception of Existential Threat(s) to the Group

1. Arguments for Perception of High Existential Threat:

AM leaders tend to view the entire external world to be a realm where "evil" forces are dominant, which is why they typically seek to isolate their followers from the corrupting influences operative in that realm. They also tend to believe that "satanic" forces, both from the outside world and possibly also within their own group, are engaged in secretly plotting to destroy them. In short, AM leaders have an extraordinarily paranoid, Manichean worldview which makes them believe that there is an unusually high and ongoing existential threat to themselves, their group, and their anticipated eschatological fantasies.

Apart from the crucial influence of these core ideological factors, the perceptions of existential threat within AM groups could be affected by the same perceptual factors that might affect other types of groups.

In the Aum case, the level of paranoia and anxiety within the cult was undoubtedly a contributing factor to

⁷⁶⁶ For the CSA, see United States, Federal Bureau of Investigation, *The Covenant, the Sword and the Arm of the Lord* (Washington, DC: Federal Bureau of Investigation, 2003); Michael Wilson and Natalie Zimmerman, *A Kingdom at Any Cost: Right-Wing Visions of Apocalypse in America* (Little Rock, AR: Parkhurst Brothers, 2009); and the insider account by a disillusioned ex-member, see Kerry Noble, *Tabernacle of Hate: Why They Bombed Oklahoma City* (Prescott, Ontario: Voyageur, 1998). A large archive of CSA source material can be found in the [Laird] Wilcox Collection of Contemporary Political Movements at the University of Kansas Library.

⁷⁶⁷ Robert Jay Lifton, "Ultimate Weapons, Ultimate Attraction," p. 190.

Aum's propensity for violence, as the cultists believed they were under sustained chemical attack by a "state power" or "powers", and that Asahara's prophecies were coming true.⁷⁶⁸ Hence, their paranoia had turned into assumptions about the state response. For instance, in 1990 a slate of Aum candidates running for the Japanese parliament, including Asahara, was largely ignored by Japanese voters. Cult leaders believed this event to be a conspiratorial act of oppression by the Japanese state and launched their weapons program.⁷⁶⁹

The expectation of existential threat may itself prompt them to cross the threshold of violence at the slightest provocation and begin enthusiastically targeting their internal and external enemies to cleanse the world of "sin" and eradicate the "forces of darkness" that promote moral corruption and try to destroy them. Such a paranoid and dangerous attitude can be observed in numerous cases, e.g., Jonestown, the Branch Davidians, Aum, the Movement for the Restoration of the Ten Commandments of God, and the OTS (Order of the Solar Temple), and one could easily imagine many other AM groups following a similar trajectory, especially if the authorities begin taking actions against them, no matter how legitimate and necessary those actions might be.

It would be very unwise for observers to assume that a condition of stasis exists within these types of religious or political milieus or that the attitudes and behavior of particular groups will remain fixed or unchanged in perpetuity. Moreover, it may well be that efforts initiated by governments to monitor, regulate, or crack down on such groups, even if they are entirely warranted and handled with appropriate sensitivity, will inadvertently serve to precipitate or hasten the kinds of internal attitudinal and behavioral transformations that may result in violent confrontations.⁷⁷⁰

2. Arguments for Perception of Medium Existential Threat:

None.

3. Arguments for Perception of Low Existential Threat:

None.

4. Final Estimation:

There is high confidence that the AM leadership's perception of high existential threat is central to their ideology and operations.

5. Factor Weight:

AM groups are even more paranoid than other types of extremist groups.

6. How this factor might change in the next five years.

Short of abandoning their AM worldviews, it is hard to envision that these types of attitudes typical of AM leaders could change to a significant degree.

J. Leadership's Preference for "Failure"

1. Arguments for Preference for Fail Deadly:

⁷⁶⁸ Jonathon B. Tucker, *Toxic Terror*, p. 222

⁷⁶⁹ Jonathon B. Tucker, *Toxic Terror*, pp. 211-212

⁷⁷⁰ "This is, indeed, a very common argument amongst NRM scholars, who are often ideologically predisposed to blame the actions taken by the authorities for causing apocalyptic groups to cross the threshold of violence. This was especially true in the wake of the tragedy at Waco. See, e.g., James D. Tabor and Eugene V. Gallagher, *Why Waco: Cults and the Battle for Religious Freedom in America* (Berkeley: University of California, 1995); and Dick J. Reavis, *The Ashes of Waco: An Investigation* (Syracuse, NY: Syracuse University, 1998). Others have foolishly extended that argument to other apocalyptic millenarian groups, including even Aum Shinrikyō, despite the fact that this is a case which illustrates precisely the opposite, i.e., that official neglect of dangerous indicators of an escalation of violent actions by apocalyptic groups, rationalized on the basis of "religious freedom," can itself potentially lead to catastrophe." (p. 12)

Ideologies serve to justify the adoption of brutal, violent methods, since the “supposed guilt of the victims absolves the terrorists ... of feelings of remorse for their actions, because a person who is defined as an enemy deserving punishment obviously deserves to be attacked.” Moreover, anyone who is defined as irremediably “evil” or allegedly culpable of “crimes” against the “forces of righteousness” – or, as one Italian left-wing terrorist characterized them, those who are “the guardians and perpetrators of every possible injustice and social suffering” – need not be dealt with humanely but instead can and should be dealt with ruthlessly and brutally. Hence it is hardly surprising that the ideological extremism manifested by apocalyptic millenarian groups, including their Manichean black-and-white ideological division of the world into “good” and “evil,” has at times been wedded to the most extreme and brutal methods, including large-scale and sometimes indiscriminate campaigns of violence. This is arguably all the more true of cult-like groups, which by definition employ relatively extreme and/or brutal mechanisms in order to control the behavior and thoughts of their own members. It is thus not hard for them to justify adopting similar methods against outsiders who are seen as representative of the “forces of darkness.” For example, if one considers numerous historical cases, such as the many peasant millenarian religious movements in medieval and early modern Europe, or similar movements in China and the Islamic world, or secularized millenarian movements from the Jacobins to the Khmer Rouge, it is clear that many millions of people have been the victims of apocalyptic millenarian fanaticism and violence. This indicates that given the wherewithal to do so, certain groups are prone to employ violence on a vast scale, which does not bode well inasmuch as it suggests that some of them are likely to display a potential future interest in acquiring mass casualty weapons, possibly including RN weapons.

By definition, apocalyptic millenarian groups consider the external society and the existing world order to be corrupt, unjust, and controlled by irremediably “evil” or “demonic” forces. That is why they look forward so fervently to the imminent destruction of that world order and the subsequent transition to a new utopian world order free of all of the injustices and problems which currently afflict mankind, especially one free of the problems faced by their own supposedly righteous but suffering members. If groups of this type become convinced they must take violent action to cleanse the world of “evil-doers” in order for this hoped-for transition to occur, they may well be motivated to carry out mass casualty attacks on their external enemies, however defined. In practice, such groups could potentially decide to target any segment or component of society at large, including “satanic” government agencies, other enemies in the outside considered to be particularly threatening, or perhaps even the nearest and most easily attacked representatives of the “forces of darkness” that they see all around them. Because they generally regard all of mainstream society and the rulers of that society as enemies, they could conceivably attack any representative or agent of that society.

Apocalyptic millenarian groups regard the entire external world to be “evil.” Only their own followers are regarded as comprising a very special or “elected” group which is struggling to promote “righteousness” in an otherwise thoroughly corrupt world. For that very reason, anything or anyone associated with that “wicked” external world could be legitimately targeted (as could any members of the group who are viewed by its leaders as having fallen away from the true faith). Thus the range of potential targets for apocalyptic millenarian groups is unusually wide. In that sense, their technical and operational capabilities are arguably more likely to be the decisive factors in delimiting their targeting options.⁷⁷¹ However, most apocalyptical millenarian worldviews that encompass the idea of an inferior and evil world also include the belief in an incremental development of humankind; often along with a very elaborate distinction of stages of development. In the logic of some of these worldviews, only very few people are ready to proceed to the

⁷⁷¹ “HG [Heaven’s Gate] members had killed themselves because their odd but not completely novel system of beliefs told them that they alone had sufficient purity to qualify for immediate transition to a place they called ‘the Level above Human’. [...] They went to meet their destiny. [...] some of the group’s members had had themselves castrated in preparation for the transition. It was central to their beliefs that it was necessary for candidate for the passage to suppress and surpass their humanity. It was necessary to renounce all human attachments, including sex. [...] Regardless of what the world thought, The Two (or at least Applewhite), like other prophets, saw the conversion of the world in their own terms. The world needed to experience their conversion. Like them, it had to give up sex. In fact, it had to give up humanity in order to move onward in its growth to the Next Level.” Ted Daniels, *Prophets, Predictors, and Hucksters of Salvation* (New York: New York University Press, 1999), pp. 204-208.

next and more divine stage. Often these logics entail very elitist traits (also reflected in the hierarchical structures of those cult organizations). Other people are simply not ready, yet. Thus, the motive to kill other people just because of thinking that they are evil might not be as self-evident as assumed.

Once a group ceases to confine its violence to individual enemies, internal or external, and instead decides to smite “evil-doers” in a more indiscriminate fashion, it is undoubtedly more likely to select densely populated targets. Aum represents the paradigmatic modern example of this, but it should be remembered that apocalyptic millenarians in earlier historical periods frequently carried out large-scale massacres using whatever weapons were available to them. This suggests that some similar groups today and in the future would also employ whatever weapons were at their disposal, including possibly RN weapons, to kill as many of their designated enemies as possible. As mentioned earlier in this document, whether a particular apocalyptic millenarian group decided to attack symbolic targets would likely be context- and indeed situation-specific. Some such groups would surely be very interested in attacking what they regard as the “symbols of evil” in the world, whether these are human or material, in order to make a point.⁷⁷² From the perspective of these apocalyptic millenarian groups, there are powerful authorities (like national governments or malevolent space aliens, or both collaborating) who define what the public may know, and what should be kept secret. They assume that those authorities somehow know the alleged truth but withhold it because of evil motives. Therefore they implicitly accuse the government of deliberately lying to the people. This perception feeds into a battle over the right (and the legitimacy) to define truth including the ‘destiny of the world.’ Conceivably, this is a strong motive for symbolic attacks entailing communicational rather than destructive goals.

Whether the attackers would seek to escape after using RN weapons in an attack would be primarily dependent upon whether the ideology of the apocalyptic millenarian group actively encouraged self-sacrifice or martyrdom (as, e.g., is the case for many Shi’a and some Sunni Muslim apocalyptic groups), perhaps because the attackers were believed to be guaranteed entry into a “heavenly paradise” in exchange for dying for the cause, and secondarily on whether the nature of the target made it difficult or impossible to attack successfully without relying upon some type of “suicide operation.” Another factor involved in such calculations might be how valuable the actual members of the attack team were considered to be by the group’s leader: if they were regarded as indispensable, that leader would perhaps be more inclined to try to carry out an operation using techniques that might enable the attack team to escape and live to fight another day. In general, however, it can be hypothesized that members of apocalyptic millenarian groups would generally be more likely to sacrifice themselves in “suicide missions” than members of other types of extremist groups, both because of the apocalyptic nature of their beliefs and because of their unusually fervent devotion to charismatic leaders.

2. Arguments for Preference for Fail Impotent:

A “fail impotent” result would not allow an AM group to achieve its apocalyptic objectives. It would not only be a sign of abject failure, but it would also precipitate an extreme counter-response from governments of all the countries in which the group operated, and probably lead to the destruction or dismantling of the group and the arrest of its leader(s).⁷⁷³ It would allow the group to achieve notoriety, but not in a way that would be beneficial to its continued existence, much less to its achievement of its world-transformative goals.

⁷⁷² “In the realm of conspiracy theory, contradiction of fantasy is disinformation, intended to keep the public in ignorance of the startling repudiations of common sense.” Ted Daniels, *Prophets, Predictors, and Hucksters of Salvation* (New York: New York University Press, 1999), p. 203.

⁷⁷³ “Two days after the subway attack, on March 22, 1995, an unprecedented force of 2,500 police officers raided twenty-five facilities tied to Aum in three prefectures. Police maintained the pressure, ultimately staging more than 500 raids on some 300 locations used by the cult. Authorities also ran a massive manhunt for fugitive cult members. Police made massive arrests, detaining more than 400 Aum members for charges as minor as running red lights and operating an unlicensed massage parlor. Officials also have taken steps against the sect itself. In October 1995, Aum Shinrikyo was stripped of its religious status. The cult’s assets were later frozen and the group was declared bankrupt.” David E. Kaplan, “Aum Shinrikyo (1995),” in Jonathan B. Tucker, ed., *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge, MA: MIT Press, 2000), pp. 224-225.

3. Final Estimation:

Due to their ideological beliefs, AM leaders would be much more likely to prefer a “fail deadly” than a “fail impotent” result. This is mainly because they view the entire outside world as the realm of the “enemy,” and this in and of itself means that widespread destruction or disruption that was caused anywhere within that realm would be welcome even if the intended target was not destroyed.⁷⁷⁴

4. How this factor might change in the next five years.

If the AM group’s main objective was simply to terrorize outsiders, gain publicity, or temporarily heighten its reputation, it may view a “fail impotent” RN result as something other than a total catastrophe. But it’s hard to imagine a context in which this result would be preferable to a “fail deadly” result.

III. Conclusion

Overall, based on all current knowledge of the group what type of nuclear C&C do you think the group would employ and why?

Certain AM group leaders may insist that any RN attack follow a “pre-determined” plan to the letter, especially if they are unusually megalomaniacal, exceptional “control freaks,” or have the required technical or scientific background and knowledge to plan and execute an RN attack. In lieu of adopting such a “pre-determined” approach, most such leaders would arguably prefer an “assertive” approach in this context so that they would be able to exercise some de facto control over the operation from a distance, as opposed to a “delegative” approach. However, many AM leaders may adopt a “delegative” approach out of necessity because they lack the ability to micromanage such an operation due to technical, logistical, or operational limitations, or possibly because they may wish to conceal their personal authorization of an RN attack. Nevertheless, given their AM worldview and their characteristic personality traits, it can be argued that AM leaders generally prefer to exert more control in relation to the C&C aspects of an RN attack they sponsored. The documented behavior of most AM leaders provides considerable support for this interpretation.

⁷⁷⁴ “Asahara rationalized murder by preaching that one can kill someone who has committed evil acts, since the latter is condemned to hell regardless. By taking the life of such evildoers, one hastens their transition to a newly reincarnated life, benefitting the killer’s own karma. Aum’s violent attitude toward the outside world was further intensified by growing paranoia and feelings of persecution within the cult. Police say a turning point came in 1990, when a slate of Aum candidates running for the Japanese parliament, including Asahara, was largely ignored by Japanese voters. Cult leaders believed both events to be conspiratorial acts of oppression by the Japanese state. It was at this point that the cult launched its weapon programs.” David E. Kaplan, “Aum Shinrikyo (1995),” in Jonathan B. Tucker, ed., *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge, MA: MIT Press, 2000), pp. 211-212.

Profile 4: Al-Qaida Senior Leadership (AQSL)

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I. Pre-Analysis

A. General Background of the Group

Al-Qa'ida emerged out of the chaos of the anti-Soviet conflict in Afghanistan during the late-1990s.⁷⁷⁵ The thousands of men who flocked to Afghanistan from around the world in order to resist the Soviet invasion of Afghanistan, known as mujahidin, offered a pool from which violent revolutionaries could recruit. One of the most inspirational figures for these men was the Palestinian Abdullah Azzam. Through his organization, the Makhtab al-Khidmat (MAK), Azzam believed that the best of these fighters could be harnessed into an international, rapid reaction military force.⁷⁷⁶ His vision for the elite mujahidin, which came to be known as al-Qa'ida, soon came into conflict with that of the prominent Saudi leader Usama bin Ladin.

Bin Ladin, with counsel from a cadre of hardened Egyptian terrorists, most notably Dr. Ayman al-Zawahiri, took al-Qa'ida in a different direction from what Azzam had intended. Al-Qa'ida sought to brand itself as something more than the next local Islamist extremist organization. Bin Ladin wanted a global revolution. Al-Qa'ida believed the path to Cairo, Riyadh and Palestine led through the United States, what al-Qa'ida believed to be the metaphorical head of the snake.

In 1998, al-Qa'ida's American offensive moved into full swing with its brazen bombings of two American embassies in Kenya and Tanzania.⁷⁷⁷ Al-Qa'ida reiterated their call to war again in 2000 in their bombing of the USS Cole. Despite the barrage of rhetorical warnings and several key attacks, only a handful of individuals in the United States prioritized al-Qa'ida as a top national security threat before 2001.

With the group's devastating terrorist attacks on 9/11/2001 against the United States, al-Qa'ida became more than just a terrorist organization, albeit an exceptionally capable and professional one. It had become a global phenomenon. Over the next decade, al-Qa'ida's Senior Leadership managed to plot, execute and inspire a variety of attacks around the world. Through the course of the decade, however, its popularity waxed and waned as did its strength.

Al-Qa'ida's Senior Leadership is now facing an existential crisis. Most of its senior figures have been killed or captured, including Usama bin Ladin. Its media production has been ground to a virtual halt, and those senior commanders who have remained alive, most notably Ayman al-Zawahiri and Adam Gadahn, are under intense counterterrorism pressure from the US forces.⁷⁷⁸

⁷⁷⁵ Numerous histories of al-Qa'ida have been written. For a thorough background on the evolution of al-Qa'ida, see: Lawrence Wright, *The Looming Tower: Al-Qaeda and the Road to 9/11* (New York: Knopf, 2006); and Peter Bergen, *The Osama bin Laden I Know: An Oral History of al Qaeda's Leader* (New York: Free Press, 2006).

⁷⁷⁶ Thomas Hegghammer has penned an in-depth look at Abdallah Azzam. Thomas Hegghammer, "Abdallah Azzam, the Imam of Jihad," Gilles Kepel and Jean-Pierre Milelli, ed., *Al-Qaeda in Its Own Words* (Cambridge: Harvard University Press, 2005), p. 82-101.

⁷⁷⁷ For detailed coverage of the 1998 East Africa embassy bombings, see: Vernon Loeb and Walter Pincus, "Bomb Suspect Has Been a Target," *The Washington Post*, August 13, 1998. Available at: <http://www.washingtonpost.com/wp-srv/inatl/longterm/eafricabombing/stories/binladen081398.htm>

⁷⁷⁸ For a complete background sketch of Adam Gadahn, see: Raffi Khatchadourian, "Azzam the American - the making of an al Qaeda homegrown," *The New Yorker*, January 22, 2007. Available at: http://www.newyorker.com/reporting/2007/01/22/070122fa_fact_khatchadourian

Its regional affiliates have actually grown in their relevance and strength vis-à-vis the senior leadership. With a presence in Yemen, North Africa, Iraq, Somalia, Nigeria, Pakistan and elsewhere, al-Qa'ida's amorphous global associated movement persists.⁷⁷⁹ Similarly, al-Qa'ida's global movement of supporters, mostly watching from their computers, have similarly grown in number and sophistication over the past decade.

B. Identification and Brief Exploration of the Group's Key Decision Maker(s)

The most prominent remaining members of al-Qa'ida's Senior Leadership can be grouped into two categories: those who have appeared before the cameras and those who have not. As al-Qa'ida's official emir, Dr. Ayman al-Zawahiri is the most authoritative leader, according to al-Qa'ida's bureaucratic structure.⁷⁸⁰ With the loss of Usama bin Ladin, Atiyah abd al-Rahman, Mustafa Abu al-Yazid, Abu Yahya al-Libi, Abdullah Sa'id and others, al-Qa'ida's cadre of senior leaders has thinned considerably. The only other visible senior figures still alive today include Khalid al-Husaynan and Adam Gadahn. The influence that those men have over al-Qa'ida's internal operations and personnel, however, is speculative at best.

Before his death on June 4, 2012, Abu Yahya had become one of al-Qa'ida's most influential thinkers.⁷⁸¹ His message was one of righteous defiance, hardened after a decade of bitter loss and hardship. With the death of several of his closest friends and mentors, which he attributed to spies among the ranks of the mujahidin, Abu Yahya's demeanor morphed from defense to vengeance. Between his global popularity, his personal rage against a laundry list of al-Qa'ida's enemies, and his commitment to the most extreme reading of al-Qa'ida's ideology, Abu Yahya was a particularly dangerous adversary and one of al-Qa'ida's last hopes of reinventing itself as a global terrorist organization.

Very little definitive information exists as to the role or influence of Husaynan or Gadahn within the bureaucratic structure. Khalid bin 'Abd al-Rahman al-Husaynan, a relative newcomer in al-Qa'ida's lineup, has stuck almost exclusively to religious matters in the deluge of media releases he has issued. First unveiled to the global jihadist world in August 2009 by way of a comedic video addressed to U.S. President Barack Obama, al-Husaynan has since become a mainstay in al-Qa'ida media. According to terrorism analyst, Chris Anzalone,

Al-Husaynan has appeared more frequently in a quasi-military capacity, filmed with firearms delivering lectures and sermons in the field to AQC's frontline troops, emphasizing his role as a "mujahid" or warrior theologian and missionary preacher.⁷⁸²

Gadahn, whom analysts have historically discounted, has been decreasingly visible in al-Qa'ida propaganda videos. He is nonetheless one of the remaining senior leaders still likely exerting control among al-Qa'ida's ranks. Gadahn has been an extremist in one form or another for most of his life. As the Afghan jihad against the Soviets raged on through the 1980s, Gadahn was learning to wage his own Spartan struggle on his parent's goat farm in rural Southern California. Homeschooled in the primitive wooden cabin his parents had built, his childhood was austere. Gadahn, the brooding young loner, had learned from an early age that the only way to liberate oneself from the evil trappings of an overly commercialized society was to reject it

⁷⁷⁹ The State Department has argued that, despite the global presence of al-Qa'ida affiliates, the group is collectively declining in influence and power. Their strategic assessment is available: "Country Reports on Terrorism 2011: Chapter 1. Strategic Assessment," United States Department of State, July 31, 2012. Available at: <http://www.state.gov/j/ct/rls/crt/2011/195540.htm>

⁷⁸⁰ Dr. Ayman al-Zawahiri's career in terrorism has been well documented. A useful biography can be found: Robert Windim. "Who is Ayman al-Zawahiri?" MSNBC. June 6, 2011. http://www.msnbc.msn.com/id/4555901/ns/world_news-mideast_n_africa/t/who-ayman-al-zawahiri/#.UCAqC03XGSo Also, see: "Ayman al-Zawahiri appointed as al-Qaeda leader," BBC, June 16, 2011. Available at: <http://www.bbc.co.uk/news/world-middle-east-13788594>

⁷⁸¹ Declan Walsh and Eric Schmitt, "Drone Strike Killed No. 2 in Al Qaeda, U.S. Officials Say," The New York Times, June 05, 2012. Available at: http://www.nytimes.com/2012/06/06/world/asia/qaeda-deputy-killed-in-drone-strike-in-pakistan.html?_r=1&pagewanted=all&pagewanted=print

⁷⁸² Chris Anzalone. "New Kid on the Block: An Al-Qaeda Leader Ascends." Foreignpolicy.com. April 20, 2012.

outright.

With so much creative energy, Gadahn might have made a real difference for the social justice issues about which he claims to herald. Instead, Gadahn chose to advocate death and destruction against his home country under the auspices of al-Qa'ida's media apparatus, As-Sahab. His efforts to spark a mass conversion to Islam within the West failed. So did the global revolution he believed he could catalyze across the Islamic world.

Over the years, Gadahn seems to have grown exasperated with what he believes to be a global movement that is undisciplined and often self-destructive. Documents recovered from Usama Bin Ladin's compound in Abbottabad, Pakistan reveal that at the same time that Gadahn was trying to shore up al-Qa'ida's reputation with Muslims, he was trying to identify new constituencies that al-Qa'ida could co-opt. Catholics, Gadahn wrote, are a "fertile ground for call of God and to persuade them about the just case of the Mujahidin," particularly after the rage and disillusionment he believed many Catholics felt about their scandals and policies. However, "ongoing attacks on the Christians in Iraq," he explained, were not helping his cause. Given Gadahn's contempt for the regional al-Qa'ida affiliates and much of the global support movement, he would easily adopt an autocratic management style if given the opportunity. He has also modeled himself after al-Zawahiri and bin Ladin, both of whom are committed to hierarchical forms of management.

Beyond those individuals who are well-known in open sources due to their historic media appearances, there are other individuals who may or may not be involved in decision-making for the al-Qa'ida Senior Leadership. The most notable among those individuals is the man who had been rumored to have replaced bin Ladin before al-Qa'ida announced that Zawahiri had seized the reigns, Saif al-Adel. Al-Adel had been among the few senior al-Qa'ida figures who had been under house arrest within Iran until recently.

Little open source information is available about al-Adel's personality or outlook. Some analysts argue that he is an effective commander.⁷⁸³ Others suggest that he is divisive and comes across as elitist to his fellow commanders. Either way, he has avoided the spotlight and offered little for analysts to gauge his current mindset or strategic priorities.

Beyond the aforementioned individuals, there are simply no other publicly known figures within the Senior Leadership ranks who could step into the emir role and lead with any sort of authority or be able to galvanize the regional al-Qa'ida affiliates. That does not mean that an individual with the kind of managerial skill and military experience does not exist within the cadre of individuals who operate behind al-Qa'ida's dark curtain. Rather, it suggests that no other individuals have the kind of credibility outside of al-Qa'ida's senior leadership to be able to steer and guide al-Qa'ida's global movement.

C. Ideology

Al-Qa'ida's ideology is premised on what its leaders believe is a divinely mandated call for their adherents to defend Islam and its true believers against what they perceive to be an external onslaught and internal subversion. From al-Qa'ida's perspective, a global conspiracy directed by the United States and Israel, in conjunction with other Western powers seeks to secularize and lobotomize the Islamic world. Using military, economic, political and cultural weapons, this Zionist-Crusader conspiracy seeks to remake Islam into a pro-Western, capitalist, and secular ideology. Those forces are supported by a coalition of apostate Arab dictators and their lackey religious establishment. Muslims have grown so accustomed to this situation that most either do not realize they must resist this onslaught or are too scared or apathetic to try. Al-Qa'ida and its compatriots are Islam's last remaining hope, one that has been both mandated by and whose work is in the name of, Allah.

⁷⁸³ The most comprehensive biography of al-Adel has been written by Vahid Brown. Vahid Brown, "A Profile of Saif al-Adel," Combating Terrorism Center, January 1, 2008. Available at: <http://www.ctc.usma.edu/wp-content/uploads/2011/06/Saif.pdf>

Much work has been done on the obsession that some within al-Qa'ida's Senior Leadership had in the early years on pursuing weapons of mass destruction (WMD).⁷⁸⁴ Those treatments pointed to the same few religious texts that al-Qa'ida believed provided the religious justification for them to employ such weapons should they ever be able to acquire them.

The most prominent and oft discussed text is Shaykh Nasr al-Fahd's May 21, 2003 fatwa.⁷⁸⁵ Former senior officer with the Central Intelligence Agency, Rolf Mowatt-Larson, has identified in his analysis the three central arguments from al-Fahd's fatwa that pertain directly to the global jihadist movement's thinking on weapons of mass destruction.

"One kills in a good manner only when one can. If those engaged in jihad cannot do so, for example when they are forced to bomb, destroy, burn or flood, it is permissible."

"One avoids killing women and children only when one can distinguish them. If one cannot do so, as when infidels make a night attack or invade, they may be killed as collateral to the fighters."

"Similarly, killing a Muslim is forbidden and not permitted; but if those engaged in jihad are forced to kill him because they cannot repel the infidels or fight them otherwise, it is permitted, as when the Muslim is being used as a living shield."⁷⁸⁶

According to Mowatt-Larson, these arguments have provided the loose outlines of the template which most al-Qa'ida supporters have used to justify their focus on WMD and mass lethality events. They have also shaped the thinking of al-Qa'ida's current emir, Ayman al-Zawahiri, regarding mass lethality operations.

Mowatt-Larson reveals that al-Zawahiri's 2008 book, *Exoneration*, shares remarkable similarity with the structure and content of al-Fahd's 2003 fatwa. Specifically, he explains,

Zawahiri raises key Quranic themes to justify the use of WMD to include: the legality of killing women, children, and the elderly, the use of Muslim shields, the inevitability of environmental destruction, notions of retaliatory use and deterrence, attacking in the night and unintentionally harming noncombatants, among other such issues. Indeed, not only are the same scholars, clerics and quotations recounted in "Exoneration," but many of the same examples are used nearly verbatim, including the Prophet's reported sayings in the context of night raids and the harming of noncombatants, as well as the Prophet's attack on the village of al-Ta'if using a catapult—thereby permitting the use of weapons of "general destruction" incapable of distinguishing between innocent civilians and combatants.⁷⁸⁷

Beyond Fahd's initial work on the topic, few others have been as articulate on the topic of WMD. Perhaps the most obvious exception has been Abu Musab al-Suri.⁷⁸⁸ Al-Suri, an old-hand in the global jihadist movement, had literally written the book on decentralized operations. For al-Suri, maximizing lethality was vital to maintaining momentum.⁷⁸⁹ For instance, al-Suri is one of the few heavyweight global jihadists to

⁷⁸⁴ For example, see: Jerry Mark Long, "Strategic Culture, al-Qaida, and Weapons of Mass Destruction," Defense Threat Reduction Agency, October 31, 2006. Available at: <http://www.dtic.mil/dtic/tr/fulltext/u2/a521640.pdf#page=432>; Reuven Paz, "Global Jihad and WMD: Between Martyrdom and Mass Destruction," *Current Trends in Islamist Ideology*, Vol. 2 (September 2005). Available at: <http://www.gees.org/documentos/Documen-502.pdf>; James J.F. Forest, "The Final Act: Ideologies of Catastrophic Terror," Paper prepared for Fund for Peace conference on Threat Convergence: New Pathways to Proliferation? (2006). Available at: <http://www.fundforpeace.org/web/images/pdf/forest.pdf>

⁷⁸⁵ Nasir bin Hamd al-Fahd, Nasir, "A Treatise on the Legal Status of Using Weapons of Mass Destruction Against Infidels," May 2003. Available at: <http://www.carnegieendowment.org/static/npp/fatwa.pdf>

⁷⁸⁶ Rolf Mowatt-Larssen. *Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality? A Timeline of Terrorists' Efforts to Acquire WMD* Paper, Belfer Center for Science and International Affairs. January 2010. http://belfercenter.ksg.harvard.edu/publication/19852/al_qaeda_weapons_of_mass_destruction_threat.html.

⁷⁸⁷ Rolf Mowatt-Larson, January 2010.

⁷⁸⁸ Brynjar Lia, *Architect of Global Jihad: The Life of Al Qaeda Strategist Abu Mus'ab Al-Suri* (New York: Columbia University Press, 2008).

⁷⁸⁹ For more on al-Suri, see: Aaron Y. Zelin, "Free Radical," *Foreign Policy*, February 3, 2012. Available at: http://www.foreignpolicy.com/articles/2012/02/03/free_radical?page=0,0

openly call for the use of nuclear weapons against the United States in a December 2004 letter he penned to the United States Department of State. "I hope infidels or Muslims who possess these weapons will attack the United States," al-Suri reflected in the letter.⁷⁹⁰ It would be doing "a favor to mankind."

Whereas al-Qa'ida Senior Leadership's focus used to be heavily concentrated on producing theater through global terrorism, increased counterterrorism pressure and a nosedive in popularity has forced al-Qa'ida's top brass to be more selective in their tactical choices. Al-Qa'ida's senior leadership has expressly prohibited certain kinds of attacks and even threatened their own followers with the prospect of eternal damnation for failing to follow targeting protocols.

Shaykh Atiyatallah has been the most vocal senior leader to articulate the kinds of limitations on jihadist attacks.⁷⁹¹ As early as 2005, Atiyatallah was publically arguing that a strong and effective senior leadership was necessary for keeping the global movement on the right path and ensuring that individuals avoid conducting acts that, while seemingly tactically effective and perhaps popular in the short-term, would actually prove inadvertently subversive to the long-term interests of al-Qa'ida's strategic agenda. "Abstain from making any decision on a comprehensive issue and on substantial matters until you have turned to your leadership," he once advised rogue al-Qa'ida commander, Abu Musab al-Zarqawi in Iraq.⁷⁹²

Indeed, Atiyatallah was adamant about the religious and strategic necessity of consultation and outreach. He argued fervently about the use of taking stock of public opinion from members, supporters, fence-sitters, critics and even adversaries. Much could be learned from listening to how other people see you, he believed.

Furthermore, there should even be consultation with good people who are not mujahidin, among which are the people of the country where you are, the Sunnis and the like; even if they are religiously unorthodox at times, or even hypocritical, as long as they are Muslims who agree with us in the resistance and jihad, not standing by the unbelievers. An example would be many of the religious scholars and tribal leaders and so forth. This is because consulting with them (and this does not necessarily mean accepting their opinion every time, or even most of the time) and having them participate in the matter is a wise policy that is supported by evidence from religious law, reason, history, and the knowledge of nations and their experiences.⁷⁹³

In March 2011, Atiyatallah released a video titled, "Glorifying the Sanctity of Muslim Blood," which was his attempt to formalize the prescriptions and proscriptions on killing for the global Jihadist movement.⁷⁹⁴ Using four major points, Atiyatallah made clear that each Muslim has a duty to spread the "knowledge about the sanctity of the Muslim's blood, and the duty of taking all precautions to maintain, keep, and preserve it, and exercising fear lest it should be shed without right." He established the following rules on al-Qa'ida operations:

1. Prohibiting bombings and attacks that might lead to the deaths of innocent Muslims in mosques and public places such as markets, playgrounds, etc. regardless of the intended target.
2. Narrowing the scope of operations that will kill Muslims being used as human shields. It is only permissible to conduct those kinds of operations if they are expected to inflict grievous and considerable suffering on the enemy in a narrow opportunity that cannot be available in normal

⁷⁹⁰ Statement issued by the office of Shaykh Abu Musab al-Suri in response to US State Department announcement. Dated December 2004. Posted to Usama's Memo forum on January 21, 2005.

⁷⁹¹ Chris Anzalone. "Al-Qaida Loses its 'Renaissance Man.'" Foreignpolicy.com. September 9, 2011. http://afpak.foreignpolicy.com/posts/2011/09/09/al_qaeda_loses_its_renaissance_man

⁷⁹² Combating Terrorism Center at West Point. "Letter Exposes New Leader in Al-Qaida High Command." September 25, 2006. <http://www.ctc.usma.edu/wp-content/uploads/2010/08/CTC-AtiyahLetter.pdf>

⁷⁹³ Ibid.

⁷⁹⁴ Shaykh Atiyatallah. "Glorifying the Sanctity of Muslim Blood." March 14, 2011. Published by As-Sahab Media.

conditions.

3. The need for supervision over high-impact operations like bombings should be assigned to trusted specialized committees. They should study every issue separately and decide in favor of or against the permissibility to proceed with it.
4. Leaders of the mujahidin should advise their operatives that if they conduct an operation that is not in compliance with Shariah limitations on killing, he will be regarded as negligent and shall be blamed, both by men and by God.

Atiyatallah followed up on this set of instructions in August 2011 with a further attempt to differentiate between acceptable and unacceptable forms of individual violence. In "Tidings of Victory in the Month of Patience," Atiyatallah explained that there are two different types of individual actions, he counseled.⁷⁹⁵ The kind that "serves, strengthens, and conforms to the mujahidin's greater plan," and the kind that "does not conform to the mujahidin's overall plan, nor does it serve or strengthen this plan." The latter, he explains, "weaken and counteract the cause of jihad." They result in "far more corruption than they do positive benefit; they cause discord and conflict, among other things." Al-Qa'ida's tactical ambitions have been significantly lowered by organizational losses and its failure to sway opinion in the Islamic world.

With the recent death of Usama bin Ladin, al-Qa'ida's Senior Leadership has been forced to re-articulate its political goals to reassure its followers of its commitment. Here is Ayman al-Zawahiri's articulation of al-Qa'ida's political goals in a post-bin Ladin era:⁷⁹⁶

First: The Al-Qa'ida Organization is seeking to work by the Quran and prophetic tradition.

Second: We call upon our ummah to mobilize and prepare to fight while we perform the duty of jihad against the infidel aggressors, who attacked the countries of Islam, on top of them the Crusader United States, its protégé, Israel, and the rulers, who helped them and did not rule according to the Shari'ah of Islam.

Third: We reiterate our support to whoever performs jihad to raise the banner of God according to His teachings and whoever defends Islam and Muslims' rights in any Muslim country. That is because the Al-Qa'ida Organization does not belong to a certain country or nationality.

Fourth: We have not forgotten our brothers in Guantanamo, Bagram, Abu-Ghuryb, in the secret and known US prisons, and in all the prisons that were established by agents to the United States under its supervision in the heart of Islamic countries.

Fifth: We back and support the revolutions of our oppressed and repressed Muslim people, who revolted against the corrupting and oppressing tyrants after these tyrants had inflicted the severest of tortures in Egypt, Tunisia, Libya, Yemen, the Levant, and Morocco. We incite them along with the entire Muslim people to revolt and to continue their struggle, sacrifices, and resolution until the entire corrupt and oppressive regimes, which were imposed by the West on our countries and were taken as a bridge to apply its policies and to achieve its objectives, are uprooted.

Sixth: We extend our hands and open our hearts to everyone to support Islam whether he works under Islamic organizations or groups or not. Let us stand together and support one another to drive the invaders out of the lands of Islam and to support the Shari'ah until it rules in the lands of Islam rather than being ruled, leads rather than being led, and commands rather than being commanded; and until every constitution and law that contradicts the Shari'ah is revoked. Let us cooperate and assist one another to depose the corrupt and corrupting regimes and to purge our countries from all forms of injustice, repression, and corruption.

Seventh: Our true and lenient Islamic religion forbids all forms of injustice conducted against either Muslims or non-Muslims, or against the allies or the enemies. Accordingly, we confirm to every

⁷⁹⁵ Shaykh Atiyatallah. "Tidings of Victory in the Month of Patience." August 30, 2011. Published by As-Sahab Media.

⁷⁹⁶ Ayman al-Zawahiri, "The General Command of the Al-Qaida Organization: Statement on the Succession of Shaykh Usama Bin Ladin in the Al-Qa'ida Organization's Command," *Al-Fajr Media Center*, June 2011.

oppressed person in this world -- most of them are victims of the Western-US crimes -- that our religion is based on justice. We sympathize with the sufferings of the oppressed, and as a result, our jihad targets the arrogance of the United States to put an end to injustice that the oppressed have been subjected to. It is an influential effort meant to deliver them from being exploited by the West and the United States that have enslaved them, looted their resources, and ruined their environment and lives.

The aforementioned articulation of political principles and goals reflects al-Qa'ida's recognition of the organization's more limited role in a post-bin Ladin era. While committed to the ideological tenets that al-Qa'ida was established upon, its more conciliatory, collaborative approach is an important change for the Senior Leadership. It now seems to be portraying itself more as a catalyst for global change than an actor unto itself. Its metaphorical blessing of others seeking to advance similar agendas seems to have become equally or more important than acting alone.

D. Constituents

At this point, al-Qa'ida's Senior Leadership is focused on two kinds of constituencies. The first is their global movement. This includes all the "mujahidin" groups and individuals around the world who may or may not expressly identify themselves as al-Qa'ida but recognize the validity in the ideology and strategic agenda that al-Qa'ida's Senior Leadership has sought to advance. Their approach to this constituency has been somewhat mixed, depending on which leader was speaking. For Atiyah abd al-Rahman, the approach had been one of advocating restraint above all else. He sought to limit independent action and pressed more for a return to centralized decision making in order to mitigate too much autonomy devolving to those individuals and groups who may not think as strategically or globally as al-Qa'ida's Senior Leadership and those senior religious figures who understand the potential backlash that certain kinds of attacks could engender.

The second primary constituency for al-Qa'ida's Senior Leadership consists of affiliated groups, both those who consider themselves to be official franchise groups, including Al-Qa'ida in the Arabian Peninsula and Al-Qa'ida in the Islamic Maghreb, as well as those who do not, including most of the Pakistani militant groups, the Somali Al-Shabaab and others. Al-Qa'ida's leaders seem to be eager in continuing their engagement with these kinds of groups.

Al-Qa'ida's evolved role might be best understood as an accelerant or catalyst, one where its leaders understand that their degraded operational capabilities do not need to hamstring its ability to inspire, connect and resource other affiliates. Al-Qa'ida seems to now see itself as a slingshot, helping to propel and redirect the efforts of their partners.

Both of these constituencies are vital to al-Qa'ida's ability to endure. The first, its global adherents, are the wellspring from which the Senior Leadership has historically found its fighters and operatives. These are men who flocked to conflict zones around the world in order to take up arms against countries they perceived to be adversaries of Islam. But it also includes those men who brought their publishing savvy and Internet expertise. The global movement is the lifeblood of the ideology for which al-Qa'ida claims to fight. Maintaining their interest, support and spectatorship is, therefore, critical for the organization.

Al-Qa'ida's Senior Leadership is also dependent on their affiliates, less for support -- although they likely now rely on resource sharing with some of these groups -- than for relevance. When al-Qa'ida cannot conduct an attack, others may. Their sheer proximity to al-Qa'ida, in essence, helps keep al-Qa'ida relevant. Therefore, these groups are crucial for helping al-Qa'ida's Senior Leadership look operationally capable.

One of al-Qa'ida's most significant, yet overlooked, contributions in recent years is the group's ability to redirect individuals with focused local grievances into conducting attacks that still advance a global agenda. For example, the case of the three terrorist operatives arrested in July 2010 in Norway with explosives materials is an ideal example of al-Qa'ida's most significant value-added today: redirection of focus from the

local back to the global.⁷⁹⁷ By channeling the local nationalist grievances each of these men, a Chinese Uighur, an Iraqi Kurd and an Uzbek, towards an attack that would symbolically resonate with the broader global jihadist movement, al-Qa'ida's senior leadership is able to strategically outsource, wielding the energy and resources of others in a way that still advances their global agenda and outlook.

Al-Qa'ida's Senior Leadership has long been torn about the way it ought to interact with its global movement. The Combating Terrorism Center at West Point released an important study in 2012 analyzing a sampling of documents they received from bin Ladin's compound in Abbottabad, Pakistan. The letters shed new light on the kind of internal machinations at work regarding al-Qa'ida's thinking on its constituencies.

The CTC argues that three distinct positions within al-Qa'ida can be identified. They refer to the first position as "principled," represented by Adam Gadahn, which views al-Qa'ida as declaring their distance and even to dissociate themselves from groups whose leaders do not consult with al-Qa'ida yet still act in its name.⁷⁹⁸ Second, the CTC identifies those who believe that the inclusion of regional al-Qa'ida affiliate groups under the broader al-Qa'ida brand umbrella actually contributes to perceptions of growth and expansion. Bin Ladin, they argue, represented a third position wherein the al-Qa'ida senior leadership would maintain direct communication, with "brothers" everywhere, at least to urge restraint and provide advice even if it fell on deaf ears, but without franchising the brand.

Since Usama bin Ladin's death, al-Qa'ida's Senior Leadership has had to scramble to ensure the perceived continuity of governance for its constituency. Zawahiri's eulogy for bin Ladin comes across as a desperate attempt to appease a long list of constituencies that Zawahiri had to ensure remained supportive.⁷⁹⁹ To assuage any concern that the Taliban may have had about al-Qa'ida's loyalty, for example, Zawahiri reaffirmed al-Qa'ida's deference to Mullah Muhammad Omar: "We, therefore, announce that we renew our pledge of allegiance to the Amir of the Believers, Mullah Muhammad Omar Mujahid, may God protect him. We promise him that we will obey him blindly whether with the willingness of our hearts or under compulsion."

And in order to keep the mujahidin fighting around the world, Zawahiri implored them, "to make more efforts to fight the Crusaders and their collaborators." To al-Qa'ida's global movement, Zawahiri pleaded with them to "maintain cohesion" while avoiding "any operations that might endanger people in markets, mosques, or crowded places." And to the broader Muslim world, Zawahiri used the occasion of bin Ladin's death to convince them that al-Qa'ida and its followers "are their soldiers" who will fight on their behalf. Based on the tone, style and substance of Zawahiri's eulogy, it seems clear that he viewed bin Ladin's death through two lenses: one focused on maintaining bureaucratic continuity and one concerned with ensuring al-Qa'ida's trans-generational relevance.

Al-Qa'ida continually seeks support from its constituencies. The organization is constantly embattled, both in terms of its security and in the global media. Painted by most of the world as a scourge to be avoided at all costs, al-Qa'ida must convince followers to stay the course, persuade supporters to remain loyal, keep fence-sitters leaning their way and convince the Islamic world that they are fighting for, not against, Muslims.

The group had been far more keen on soliciting feedback from its global movement and playing into the trends that they believed would capture the hearts and minds of its followers. In recent years, however, its media productivity has come to a grinding halt. Its productions have returned to the old model of unidirectional delivery, focused more on communicating a message than on eliciting a dialog.

The letters from bin Ladin's compound reflect a senior leadership that was highly anxious about the discipline, commitment and focus of their global affiliate groups. Bin Ladin believed that most of these

⁷⁹⁷ "Norway Terror Plot 'Targeted Danish Paper.'" *The Telegraph*. September 28, 2010.

⁷⁹⁸ *Letters from Abbottabad: Bin Laden Sidelined?* Combating Terrorism Center at West Point. May 3, 2012. Pg. 21.

⁷⁹⁹ Ayman al-Zawahiri. "The Noble Knight Dismounted." *As-Sahab Media*. June 8, 2011.

affiliates lacked the kind of global vision or strategic mindset that they needed. Winning hearts and minds had to come before violence for the sake of violence. There have been long-standing rumblings that al-Qa'ida's affiliate in Iraq has done more damage to the al-Qa'ida brand name than good. Gadahn even advocated⁸⁰⁰ that the senior leadership disassociate their organization from the affiliate altogether.

With regard to Al-Qa'ida in the Arabian Peninsula (AQAP), al-Qa'ida's affiliate in Yemen, bin Ladin seems to have been staunchly against AQAP's attempt to invest resources into opening a new front. For him, AQAP's efforts were a distraction from other missions and objectives.⁸⁰¹ Attacking the West ought to have been the priority, not trying to establish a new emirate in Yemen. Similarly, bin Ladin was dubious of the benefits from having al-Qa'ida establish any formal, public relationship with Al-Shabaab in Somalia.⁸⁰² The relationship exposed al-Qa'ida's brand to more potential problems than it did benefits.

Al-Qa'ida's once cavalier attitude about conducting brazen attacks in the heartland of the Middle East has changed to one of reputation management and damage control. The organization is highly attuned to and concerned about how their global movement perceives their ideology, their attacks and their personalities.

Since bin Ladin's death, al-Qa'ida has established a formal relationship with Al-Shabaab, likely at Zawahiri's bidding. The effort has been to seemingly consolidate the global jihadist movement under Zawahiri's singular roof, if not in command and control then at least in name. Ensuring that his affiliates and associates remain loyal and supportive of al-Qa'ida's overall mission, operations and personnel on the ground is vital.

Beyond trying to forge better relations with the affiliates, the only media coming out of the senior leadership recently has been Zawahiri's direct appeal to the people of nearly every Middle Eastern country. In other words, Zawahiri has been on something of a public relations binge, trying to bolster al-Qa'ida's polling numbers among the people while demonstrating at least a modicum of relevance.

Financial Backing

Al-Qa'ida's financial backing has long been an area of speculation in the public domain. Current reports suggest that al-Qa'ida's current financial state is weak.

There has been a steady trickle in open source reporting detailing arrests of individuals making material and financial contributions to al-Qa'ida. A Pakistani-American cab driver in Chicago, Raja Lahrasib Khan, who gave money to al-Qa'ida operative Illyas Kashmiri, for instance, was sentenced to seven-and-a-half years in prison on charges of providing financial assistance to terrorist group.⁸⁰³ Khan, who became a US citizen in 1988, had only donated approximately \$500 and attempted to donate another \$1,000 to al-Qa'ida.

In another case, two New York men pleaded guilty in federal court in June to providing material support to al-Qa'ida. Wesam El-Hanafi and Sabirhan Hasanoff, both U.S. citizens, pleaded guilty to providing "financial support, equipment, and technical advice to al Qaeda associates in Yemen and elsewhere, and to conspiring to provide material support to al Qaeda."⁸⁰⁴

These cases, while small in the amount of money being donated, shed significant light into the kinds of grassroots, low-level support that continues to prop up al-Qa'ida.

⁸⁰⁰ SOCOM-2012-0000004. Combating Terrorism Center at West Point, Harmony Project's Abbottabad Document Release. Original letter dated January 2010. Available: <http://www.ctc.usma.edu/posts/socom-2012-0000004-english>

⁸⁰¹ SOCOM-2012-0000016-HT. Combating Terrorism Center at West Point, Harmony Project's Abbottabad Document Release. Available: <http://www.ctc.usma.edu/posts/socom-2012-0000016-english>

⁸⁰² SOCOM-2012-0000005-HT. Combating Terrorism Center at West Point, Harmony Project's Abbottabad Document Release. Original letter dated August 7, 2010. Available: <http://www.ctc.usma.edu/?s=SOCOM-2012-0000005-HT&type=all&program=all&order=desc>

⁸⁰³ Andy Grimm. "Chicago Cabbie Sentenced to 7 ½ Years in Terrorism Case." Chicago Tribune. June 8, 2012.

⁸⁰⁴ Julia Greenberg. "Feds: Two New York men plead guilty to supporting al Qaeda." CNN.com June 18, 2012. http://articles.cnn.com/2012-06-18/justice/justice_new-york-al-qaeda-support_1_al-qaeda-associates-federal-court-statement?_s=PM:JUSTICE

The state of al-Qa'ida's financial health is not well reported in open sources. Rumors continue circulating throughout the global media that al-Qa'ida is currently facing a severe cash crunch. A January 2012 article in Businessweek.com tried to address the issue head-on. The article quoted multiple US intelligence officials, speaking under anonymity, who said al-Qa'ida's Senior Leadership has been forced to scale down its spending on training, recruiting and payments to terrorists' surviving family members. According to their sources, the US has detected many more complaints from al-Qa'ida members about money shortages.⁸⁰⁵

Al-Qa'ida's financial woes are by no means new. David Cohen, the US Treasury Department's undersecretary for terrorism and financial intelligence official noted that by 2009 and 2010, "we were able to say that al-Qa'ida was in its weakest financial condition since 2001."⁸⁰⁶

Terrorist organizations like al-Qa'ida have certain financial processes that they must undergo in order to keep money flowing through the organization, including raising, laundering, moving, spending or investing money. US-led efforts in recent years to make each of these activities harder for al-Qa'ida seem to be working.

Another complicating factor for al-Qa'ida is the success that American forces have had capturing financial documents on the ground. At no time was this truer than in the bin Ladin raid in Abbottabad, Pakistan. According to US officials, treasure troves of documents and records were found in the compound, many of which pertained to al-Qa'ida's financial transactions, which likely impacted the group's freedom of financial movement.

All that said, terrorist attacks require little funding as demonstrated by Al-Qa'ida in the Arabian Peninsula in their cargo plane bomb plot, which they boast only cost \$4,200.

As might be expected, al-Qa'ida's Senior Leadership has not openly discussed their thinking about the consequences of using WMDs. This does not mean that they have not considered the implications of mass lethality situations. But explicit mentions of WMD from senior al-Qa'ida leaders are rare.

Al-Qa'ida's core organization has grown more sensitive to politics. In their weakened state, they are trying to avoid any attack that may have collateral impact on the Islamic world in order to keep their poll numbers up. From Zawahiri's perspective, legacy is critical; therefore, any attack that results in a negative portrayal of al-Qa'ida must be avoided. Most likely, he would rather not conduct any attacks than conduct an attack that has the chance to create existential blowback against what little funding the group currently receives, and, importantly, his lasting reputation.

There may be a hardline element that remains within the al-Qa'ida senior leadership that believes only a major, polarizing attack would be enough to reinvigorate the kind of global support that they need to dig themselves out of their current popularity crisis. With their most rabid advocate, Abu Yahya al-Libi, now dead, any adherents to this ultra-militant reading of al-Qa'ida would need to assert themselves over Zawahiri. Since there are no obvious individuals of this ilk, it is most likely that as long as Zawahiri is alive, the status quo situation will prevail.

This would be unthinkable for the al-Qa'ida establishment. A premature detonation in the Islamic world would be devastating for the group and its global movement. Global and financial support would likely plummet as a result. There is no foreseeable way that al-Qa'ida would be able to bounce back from detonating a nuclear device in an Islamic country after the past decade.

⁸⁰⁵ Ian Katz and John Walcott, "Al-Qaeda Members Gripe Over Cash Crunch as U.S. Targets Funding," *Bloomberg BusinessWeek*, January 18, 2012. Available at: <http://www.businessweek.com/news/2012-01-11/al-qaeda-members-gripe-over-cash-crunch-as-u-s-targets-funding.html>

⁸⁰⁶ Ibid.

Al-Qa'ida's Senior Leadership would, therefore, have to make very careful calculations about where to stage and transport such a device. There would be no senior leaders who would be willing to tolerate such an attack in an Islamic country.

Furthermore, if the bomb were to detonate within Iran, al-Qa'ida's relationship with that country would likely end. Already there are indications that something is changing vis-à-vis the unspoken truce that Iran and al-Qa'ida's core group have seemingly maintained for years. This change has been reflected by a growing willingness by senior figures within al-Qa'ida to criticize the Iranian regime. Previously, al-Qa'ida was hesitant to even mention the country by name.

Links to State Sponsor(s)

Although there is a short list of rogue regimes and illicit actors operating in today's world, the number of them that might see providing financial support to al-Qa'ida as in their strategic interests is even shorter. The governments of Iran and North Korea are the most likely. There are possibly actors within the Pakistani government who would view al-Qa'ida's attempt to deploy a nuclear device against the West as in their strategic interests as well.

The al-Qa'ida-Iran relationship has been subject to significant debate and controversy in the open source domain. That said, there seems to be a generally held consensus that senior al-Qa'ida leaders had been operating, at least to a limited degree, within Iran with that government's knowledge and potentially its assistance. However, the extent to which Iran has sought to actually facilitate al-Qa'ida operations is unclear.

The U.S. State Department's *Country Report on Terrorism 2011* discusses Iran's relationship with al-Qa'ida. According to the report, Iran maintains an "interest in using international terrorism – including in the United States – to further its foreign policy goals." According to the report, "Iran continued to provide lethal support, including weapons, training, funding, and guidance, to Iraqi Shia militant groups targeting U.S. and Iraqi forces, as well as civilians. Iran was responsible for the increase of lethal attacks on U.S. forces and provided militants with the capability to assemble explosives designed to defeat armored vehicles."

With specific regard to al-Qa'ida, the report found that "Iran remained unwilling to bring to justice senior AQ members it continued to detain, and refused to publicly identify those senior members in its custody. It also allowed AQ members to operate a core facilitation pipeline through Iranian territory, enabling AQ to carry funds and move facilitators and operatives to South Asia and elsewhere."

The detonation of a nuclear device anywhere in the West would likely be looked upon favorably by elements of the Iranian regime so long as their backing of the organization remained undiscovered and if there were no backlash brought against them by Western governments. A detonation of a nuclear device within Saudi Arabia by al-Qa'ida would also be seen as a favorable development by the Iranian regime so long as no fallout impacted their country. Operating through an "enemy-of-my-enemy" mentality, Iran has seemed tolerant of al-Qa'ida's plotting so long as it is directed against Saudi targets.

Should a device improperly detonate, including a fizzle, there would be more ability for governments to conduct forensic testing on the device and gain a better sense of the perpetrator's identity. If the technology or components were provided to al-Qa'ida by Iran, and the device failed to fully detonate, Iran would more than likely view that as a very negative outcome.

The pockets of support within the Pakistani government that would actively support al-Qa'ida would likely view any attack against Western targets, even if the device were to improperly detonate, as a strategic success. According to the Afghan parliament's Security Commission from April 2012, Pakistan's Inter-Services Intelligence Directorate continues to support the Taliban and al-Qa'ida in the northeastern province of Nuristan. In a news report covering the story, Representatives of Wolesi Jirga's Security Commission expressed concerns over the influence of Taliban in eastern Nuristan province. Muhammad Naeem Lali

Hameedzai, a member of Wolesi Jirga's Security Commission said, "The Barg-i-Matal and Kamdesh district of Nuristan province are influenced by Taliban militants and have the financial and military support of ISI".⁸⁰⁷

E. Specialists in the Group

Al-Qa'ida's Senior Leadership likely sees its internal technical knowledge and training vis-à-vis nuclear devices to be low if present at all. The group long ago abandoned developing any in-house expertise in this realm and would likely have to rely entirely on an external group or party to provide the components, training and technical expertise. It is more likely that the Senior Leadership, whose primary goal at this point has been simply avoiding Predator drone strikes and maintaining a semblance of leadership over its fracturing global movement, would look to import that kind of expertise rather than developing it internally.

F. Existential Challenges to the Group

Al-Qa'ida's Senior Leadership is intensely paranoid about Western knowledge of their plans but remains confident in their ability to outsmart those surveillance measures. Where al-Qa'ida believes they are weakest, however, is the penetration of their movement by local spies. Because of this intense concern about leaks through spies, any operation of this magnitude and sensitivity would be highly compartmented to a small collection of trusted members.

Al-Qa'ida's Senior Leadership likely believes that: if the United States discovered that the group was either planning to build or had successfully acquired a nuclear device, it would use any means necessary to eliminate it. After President Obama made the decision to enter Pakistani sovereign airspace in order to conduct a military operation against Usama bin Ladin without Pakistani coordination, al-Qa'ida came to understand that the US was willing to take unprecedented measures in order to pursue al-Qa'ida. This recognition has likely meant that, if al-Qa'ida were to be planning this kind of operation, and if they were concerned about details being leaked to the US by way of local spies, that they would plan to deploy any operational device quickly.

Al-Qa'ida recognizes that it took ten years for the United States to find and kill bin Ladin. A number of their other senior leaders continue operating with impunity. In other words, the US has its limitations. Al-Qa'ida is also aware of the strained relationship the US has with the Pakistani government and, therefore, preemptive strikes on al-Qa'ida would come at the expense of that relationship. American intelligence would have to be quite accurate before it would be willing to authorize a covert strike against a potential nuclear device in Pakistani sovereign space. If the United States were to decide to conduct a preemptive strike and if al-Qa'ida was preparing the device in sovereign Pakistani space, the US would be forced to calculate whether it would be prepared for that device to be detonated or to disperse radioactive materials inside of Pakistan.

Al-Qa'ida would similarly have to decide whether they were willing to detonate the device inside of Pakistan should the US conduct a preemptive attack. None of these questions have clear answers.

No, there are currently no obvious targets. Although the US targeted killing policy has placed enormous constraints on the freedom of movement and scope of activities for the Senior Leadership, within these parameters, the remaining al-Qa'ida operatives have apparently mastered the art of counter-surveillance and OPSEC vis-à-vis US and Pakistani intelligence.

II. Factor Analysis

A. The Leadership's Tolerance for Uncertainty

1. Arguments for High Tolerance:

⁸⁰⁷ "Taliban control Bargematal and Kamdesh districts of Nuristan" *Ariana News*. April 11, 2012. <http://ariananews.af/regional/taliban-control-bargematal-and-kamdesh-districts-of-nuristan/>

- Al-Qa'ida risks becoming totally irrelevant in the wake of the Arab Spring
- There are willing potential partners (Iran) with common enemies so the window is there.
- Their staff is only shrinking and this kind of attack could provide badly needed influx of capital and recruits
- Muslims are forgetting the lessons from 9/11 and falling back into complacency.
- Not doing something now runs the risk of squandering two decades of effort.

At this point, al-Qa'ida's Senior Leadership is under extreme duress. Should Ayman al-Zawahiri be killed, there is no obvious successor. If someone like the recently killed Abu Yahya al-Libi were the last leader standing, there is a chance that he would authorize a full-scale assault on Western and/or Arab governments. If nuclear devices were easily obtainable, there is a high likelihood that he could authorize a nuclear attack.

As al-Qa'ida's most senior religious figure, Abu Yahya wrote the religious rulebook for the organization over the past five years. As such, there would be little religious constraints on a follower of Abu Yahya from authorizing a nuclear attack against his adversaries. Certainly, he would face an onslaught of criticism from senior Islamic figures outside of al-Qa'ida, and probably a number of those religious seniors who once supported al-Qa'ida but have since come under the thumb of their host government. But ideologues in Abu Yahya's mould have previously demonstrated that they are not stopped by pleas from formers for moderation.

Politically, a nuclear attack could move al-Qa'ida into a position where governments would finally be forced to concede on policy matters in the face of the threat of follow-on attacks. The level of devastation that would be caused from a successful nuclear detonation would likely stir so much pressure among Western populations that their governments would be forced to make some concessions. It could accelerate America's departure from Afghanistan and could further prompt a reduction in America's interaction with Middle East governments. If the attack were committed within the Middle East, it would likely destroy that government's credibility internally and make other governments more apt to negotiate with or make concessions to al-Qa'ida. However, these concessions (from Western or Middle Eastern governments) would only be made if al-Qa'ida could convince their opponents that they have the capabilities to execute a follow-on attack.

For Abu Yahya and his ilk, the point of conducting terrorist attacks is not about inflicting mass lethality, but using the killing and destruction that could ensue from the deployment of this kind of attack as a way to showcase their seriousness of purpose and coerce a fundamental change in policy by Western governments. In this calculus, it could also help to catalyze a popular uprising against Arab governments. Given this goal of terror rather than destruction, the decision would be extremely risky; if it were to backfire, it would quite likely spell the death of al-Qa'ida.

Al-Qa'ida's Senior Leadership has a pervasive fear of infiltration. Therefore, security concerns would be high. Operations would be minimally staffed, informed at the very last moment and compartmentalized as much as possible.

Al-Qa'ida has lost a number of its senior commanders. They do, however, seem to remain confident in their public tone about their ability to conduct tactical operations against adversary forces. Al-Qa'ida itself has been responsible for very few complex attacks in recent years, so it would either have to scale down the complexity of an attack, or rely heavily on external partners. The role of the Senior Leadership would largely focus on target selection, coordination, facilitation and post hoc religious justification.

Al-Qa'ida is a highly rational organization, at least when analyzing whether their attacks flow from their stated goals and potential capacity. That rationality is not the same kind of rationality that Western bureaucratic organizations would employ, however. Al-Qa'ida's primary decision variables include:

- Symbolic impact
- Media coverage
- Religious legitimacy
- Prospect of tactical success
- Strategic utility

When considering whether or not to perpetrate an attack, these variables seem to be at the forefront of their decision matrix. While Western analysts may believe that other kinds of attacks would have larger impacts or be more viable than the kind that al-Qa'ida has historically conducted, from the Senior Leadership's perspective, they conduct attacks that are within their means and in support of their goals.

2. Arguments for Medium Tolerance:

With a shrinking number of qualified operatives and a rapidly diminishing cadre of authoritative leadership, there may be internal pressure for one last parting shot before the Senior Leadership collapses. There may also be external pressure from countries like Iran to leverage al-Qa'ida's compromised position into an opportunity to inflict damage against its adversaries by way of al-Qa'ida. Additionally, the younger and less experienced that al-Qa'ida's core leadership becomes, the more likely they might be to take drastic measures in order to prove their relevance and significance in history. The last thing a young leader would want is to watch al-Qa'ida become irrelevant on his watch.

3. Arguments for Low Tolerance:

- The external security situation is too problematic
- The chance of penetration from insider spies is too high
- The technical expertise within the organization is too low
- The organization would have to rely too much on external assistance
- The chance of a misfire could be disastrous for their public reputation
- The senior leaders are satisfied with their legacy and eager to maintain the status quo
- A successful strike would provoke massive counterterrorism backlash

By this point in history, al-Qa'ida has demonstrated that it can adapt its ideology to fit its political and strategic priorities. There is simply nothing that it is not willing to justify, so ideology is not what is going to keep al-Qa'ida from deploying a nuclear device.

The same point about al-Qa'ida's ideological flexibility can be applied to its perceptions of the religious validity of using a weapon of mass destruction. What they would be more concerned about, however, is the broader Islamic world's perception of the religious validity of using such an attack, particularly if it occurred in the Middle East. At this point, there is a very strong push within al-Qa'ida against upsetting the current status quo.

A nuclear attack has the risk of making al-Qa'ida so toxic that no state would be willing to provide even passive support for the organization, complicating their activities not just in the Afghanistan/Pakistan region but globally. It may also catalyze an international effort and will that had not previously existed to combat al-Qa'ida aggressively.

The only reason that a leader like the late Abu Yahya might be hesitant to authorize an attack should he be in charge would be for political expediency. Some leaders seem to prefer acting in an ambassadorial role for the organization and, therefore, are constantly bombarded by a host of other organizational priorities. If a senior leader viewed that an al-Qa'ida nuclear attack would do more harm than good for those other groups and their agendas, he could be pressured not to authorize such an attack.

Al-Qa'ida's current leadership under Ayman al-Zawahiri is highly unlikely to deploy a nuclear device. His legacy has already been challenged given the group's post-9/11 penchant for conducting attacks inside the Islamic world. Digging out of that hole and re-characterizing al-Qa'ida as a social force for the good of

Muslims instead of as a terrorist group that inflicts violence against its own people is the overwhelming priority for Zawahiri. As long as he maintains his position as emir of the Senior Leadership, it should be viewed as highly unlikely that al-Qa'ida would conduct a nuclear attack.

Given the numerous casualties that the US drone campaign has inflicted upon members of al-Qa'ida's Senior Leadership, the organization takes extreme caution to safeguard their remaining personnel and operations. The group's media production has virtually ground to a halt in recent years, likely a direct result of their inability to communicate or maneuver freely. This stoppage of media production suggests that their freedom of operations is also constrained regarding attack operations. Knowing the extent to which the US has been willing to go in pursuit of these senior figures, there is probably a low degree of interest and tolerance for risk taking among most of the group's membership. Even the pressure from a charismatic leader like Abu Yahya would probably not convince more than a handful of members to take an elevated risk in order to conduct an operation that has the chance of adding only more security pressure and backlash from the US.

The decrease in media output from the organization has resulted in a growing disconnect between the leadership and its global movement. This gulf between al-Qa'ida and its global constituency is an additional reason that a high-risk, highly-contested operation such as the deployment of a nuclear device would not be well received by the movement. Historical precedent suggests that al-Qa'ida, at least under Ayman al-Zawahiri, is not keen to do things that alienate his remaining supporters.

4. Final Estimation:

Al-Qa'ida's level of tolerance for risk and uncertainty is likely a combination of high and low. On the one hand, the organization has risk-averse stalwarts like Zawahiri who are concerned above all else with enduring the onslaught of counterterrorism pressure, shoring up the group's public reputation and expanding its partnerships among like-minded partners and stakeholders. Anything that threatens the long-term viability of the group or the personal legacy of bin Ladin and Zawahiri would be likely rejected. On the other hand, Abu Yahya's remaining acolytes likely recognize that al-Qa'ida's legacy risks becoming one of incompetence and irrelevance. Without a major operation that both reawakens the consciousness of Muslims and forces them to choose which side of this fight they are on, years of effort will be for naught. The very best way to make that point would be with an unprecedented attack, one like a nuclear device.

The strategic tension between these two tendencies is not yet manifested in public discourse, which is likely a reflection of the limited amount of communication that al-Qa'ida has been able to release or their long-standing commitment to avoid public in-fighting. However, the realistic possibility of al-Qa'ida's impending collapse has to have dawned on the Senior Leadership given the mounting losses they are facing. However, as long as Zawahiri remains in control, the tolerance for uncertainty among the AQSL will likely continue to remain low.

5. How this factor might change in the next five years.

Al-Qa'ida is reaching a point in its organizational life cycle that it may not have five years left in its current form. If they cannot adequately replace the senior and mid-level commanders who have been killed, the organization will further compress. Individuals will be picked off at the margins; the core group will grow increasingly silent; and the global movement will lose its leadership and its strategic direction. The movement will look for inspiration in popular figures who may or may not find universal consensus or authority, like an Awlaki or a Zarqawi. This would create factions, accelerate in-fighting and eventually atomize the movement to the point where al-Qa'ida really does become little more than a generic label.

Detonating a nuclear device, because of the potential for lethality and devastation, and given how unprecedented it is, would be a game-changer for the group. The question is which way would it change that game and who needs to be in control of al-Qa'ida in order to authorize such an attack, requiring a surfeit of either confidence or desperation. It is extremely unlikely that Zawahiri possesses that level of assuredness and more than likely most of his loyalists do not either. However, there is always the potential

for a to come into play.

The most likely wildcard is that the death of Zawahiri will lead to the succession of an Abu Yahya-like commander to the position of al-Qa'ida emir. To realize a nuclear attack, such a commander would have to authorize such an attack as well as obtain a viable nuclear device.

B. The Leadership's Definition of "Success"

1. Arguments for Success Entailing a Specific Outcome:

Al-Qa'ida sponsored attacks in recent years have left much to be desired from their perspective. While they have sought to spin botched or thwarted attacks as successes, there is an obvious reality that they have not managed to successfully conduct a major operation inside the United States since 9/11. If the organization were going to take this kind of risk, a detonation in the right time and place would be necessary to ensure that they break this perception of being "bad" at doing terrorism.

- The device would have to detonate.
- It would have to occur in a Western country.
- It should probably occur in a densely-populated symbolic urban area, such as New York or Washington DC in order to have maximum impact.

Beyond those requirements, little more would be necessary for their global movement to view the attack as a success.

Given al-Qa'ida's historical targeting, lethality tends to be more about propaganda and publicity than about killing people. Certainly, this is not something that they try to minimize when it comes to striking targets in the West. Quite the contrary: maximizing lethality is a top priority. The more people al-Qa'ida could kill in the attack, and the more infrastructure they could damage, and the longer that the fallout kept that geography uninhabitable, the more of a publicity boost they would get.

The more compelling question for their strategic goal is whether that coverage would alienate al-Qa'ida from their core constituencies or provide them with the kind of boost in recruiting and fundraising that they so desperately need. It is difficult to speculate and, in large part, depends on the thinking of the current leadership. The proven possession of a viable nuclear weapon without it detonating would likely produce considerable political dividends without risking public revulsion. Hardliners in the group would be livid, however, if al-Qa'ida managed to acquire a nuclear device and was not capable of detonating it.

The political goal to remain relevant as a vanguard of the movement would make being successful extremely important. A detonation would help demonstrate al-Qa'ida's continuing relevance. However, mere possession of a viable nuclear weapon would also increase the group's attractiveness to other VNSAs within the larger Islamist movement.

There is very little chance of negotiating with al-Qa'ida in a way that would be mutually agreeable during a nuclear exchange. Their demands would be entirely unacceptable to the United States. Additionally, there would be so much domestic political pressure placed on the President to take massive retaliatory action that, unless al-Qa'ida could prove that they had the ability to conduct follow-on attacks, the U.S. would be more interested in launching an offensive than trying to make a deal.

At this point, al-Qa'ida's global supporters are so desperate for a successful attack they would embrace virtually any kind of operation in the West that resulted in media attention, infrastructural damage or lethality. That said, the attack would not be supported if it were deemed by the jihadist intelligentsia as being counterproductive to the cause. Therefore, the nuclear detonation must actually hit a Western target rather than detonate early within Islamic territory.

2. Arguments for Success Allowing for a Suboptimal Outcome in Target and/or Timing:

Most suboptimal outcomes would only moderately help advance al-Qa'ida's long-term strategic goals.

- The fact that al-Qa'ida had achieved a viable nuclear weapon is itself a victory. It represents a marked achievement for the group and would, invariably, cause a flurry of concern and new spending in the United States.
- The target would still need to be urban. If the device were to detonate in transit in a more sparsely populated area, there would be virtually no way to spin it from al-Qa'ida's perspective. Even if it went off, the focus would be on the fact that it detonated prematurely, heavily detracting from the group's primary goal of flexing their terrorist muscle after an extended hiatus. Acceptable, yes. Optimal, no.
- A premature detonation would be invariably spun as a success by the movement's propagandists. They would say the fact that they were able to acquire a functional device and deploy it shows that they could do it again. This was the same kind of post hoc justification employed in the aftermath of Faisal Shezad's botched Times Square bomb attempt and Umar Farouk Abdulmutallab's botched Christmas Day airline bomb attempt. While it may have held sway with the group's most ardent believers, they were hard-pressed to demonstrate success through failure with fence-sitters and beyond.

A premature detonation could go either way, depending on the specifics. It would still be unprecedented that al-Qa'ida was able to acquire, deploy and detonate a nuclear device. That alone would have massive ripples throughout the international community. As a result, because al-Qa'ida's goal is terror rather than destruction, a premature detonation that does not cause significant collateral damage to its constituents would be acceptable. However, if it were to cause collateral damage, it would likely be too costly.

It could be used to show that extraordinary means must be taken against them and potentially catalyze a coalition against them in a way that would not have been possible without a full detonation.

There is a very low likelihood that either side would negotiate in the aftermath of a nuclear detonation. The United States would probably opt for massive retaliation until the group was effectively dismantled. And al-Qa'ida's leadership would not have authorized a nuclear detonation if they were interested in backing off of their demands. The question will come down to whether the U.S. has a viable target to retaliate against and whether al-Qa'ida possesses a second device that it can use as leverage.

3. Arguments for Success Allowing for a Suboptimal Outcome Resulting in a "Fizzle" Yield:

A fizzle yield would be the equivalent of a failure. There is little way for al-Qa'ida to spin the fact that they squandered a golden opportunity to display relevance. In fact, rather than being a marginal advance, a fizzle yield would do more damage than good for the organization. The immediate impact would be to create fear and panic that they were able to obtain the device but longer-term analysis and discussion would likely shift to the fact that they were unable to detonate it successfully, harkening back to the long train of other failed attacks and thwarted plots. A fizzle yield would also leave a device intact that could be analyzed for clues about the origins of the material. If they had received material from a state government, that could create tensions between the group and that state.

There is no identifiable link between the tactical outcome of a fizzle yield and any positive strategic goals. Beyond the shock that al-Qa'ida was able to acquire such a device, the rest of the story is the fact that they could not make it work.

The most likely political outcome is that a vocal and aggressive coalition of states – both in the West and the Middle East – would not be motivated to join together. In other words, while it would still be a blow to al-Qa'ida's reputation and perceived competence, it would probably not elicit the kind of intense military backlash that a partial or total detonation would provoke. In that sense, al-Qa'ida would be more or less in the same position. Little policy would change but they would still survive to see another day.

It is unlikely that the group's leadership will be open to negotiations during nuclear exchange(s).

4. *Final Estimation:*

Given the steep toll that the past decade of counterterrorism efforts have taken on al-Qa'ida's Senior Leadership, they cannot afford another misfire, especially on an operation of this significance. They would be hard pressed to accept anything other than a specific outcome. An incorrect target or timing could be spun in their favor but would have no long term benefit and likely only serve to elevate the threat that Western countries believe al-Qa'ida poses. Likewise, a fizzle would likely be extremely damaging to their reputation and would reveal their nuclear suppliers, yet could still spark an increase in the hostility of the global environment. Estimate: success requires a specific outcome.

5. *How this factor might change in the next five years.*

The al-Qa'ida senior leadership's ability to survive another five years has been placed into serious question with the continued killing of its top figures. The group's global popularity has plummeted and they have never been less relevant to the politics of the Middle East than they are today. Al-Qa'ida has been unable to rekindle their media apparatus and what productions they do issue are no longer covered by the global press in any depth. The series of misfires and mistakes by their operatives has placed the group in a situation where they need some way of reigniting the kind of enthusiasm they had generated with the 9/11 attacks within their global movement.

If al-Qa'ida is able to conduct an attack in the United States of any kind, it means that their entire decision-making calculus changes. Their strategic priorities and goals, their tolerance for risk, the focus of future operations. Success also raises the stakes. A failure to meet or exceed a success, particularly to a fickle and unsatisfied global support movement, would be damaging and they would employ every measure at their disposal to continue the momentum.

C. The Importance to the Leadership of Flexibility in the Field

1. *Arguments for High Importance:*

Given the likelihood of operatives and commanders being killed in the field, al-Qa'ida has come to depend on their members' interpretations of intent rather than direct orders. Flexibility is central in an era where communications are compromised and trust relationships are strained.

2. *Arguments for Medium Importance:*

The challenge with empowering operatives, however, is that they might make mistakes. As al-Qa'ida has learned over the past decade, even minor tactical adaptations can have massive strategic consequences. There is, therefore, a careful balance between authorizing members to be flexible in the field while attributing the kind of religious accountability that should they make a mistake, they are responsible, not just to al-Qa'ida but to God, for their actions. Al-Qa'ida recently sought to increase their ability to exert command and control over their global movement by proxy through the use of this fear of God's punishment. Recognizing that their authority was limited, Shaykh Atiyatallah instead began a campaign of systematically cordoning off behaviors al-Qa'ida viewed as strategically problematic and then made God the final arbiter, not themselves.

3. *Arguments for Low Importance:*

The senior leadership under Zawahiri is likely to be risk-averse at this point in al-Qa'ida's life cycle. While maximum flexibility may make the most tactical success – allowing them to conduct an operation successfully – it seems that Zawahiri would rather cancel an operation before he would risk the long-term strategic future of al-Qa'ida. In that sense, Zawahiri's elitism may lead to the senior leadership's placing a low priority on operational flexibility, due to concern for command and control and a focus on compartmentalization.

4. *Final Estimation:*

This really depends on who is the emir. If Zawahiri remains in control, he will continue down the path of

limiting and restricting the autonomous action of franchise groups and self-starter cells. His goal will be to maintain as much of a semblance of hierarchical command and control over not just the Senior Leadership but also the global movement on all levels of aggregation. This approach is premised on the belief that al-Qa'ida is not fading away and is in no need of a last-ditch operation.

If others of a similar disposition to Abu Yahya al-Libi assume control in the event of Zawahiri's death, they could promote a strategic vision that any action is better than no action. In that sense, autonomy would be devolved to any group or even individual operative who was willing to conduct an attack against a pre-approved category of target. In that case, maximum flexibility and autonomy would be preferred.

Estimate under current conditions: low importance.

5. How this factor might change in the next five years.

Al-Qa'ida's willingness to empower its cell leaders and operatives with increased flexibility in the field hinges on their level of confidence. At either high levels or low levels, al-Qa'ida's senior leaders are likely to tolerate the risk that accompanies this level of autonomy. In that case, events that push the confidence of al-Qa'ida's senior leaders either significantly up or down is likely to impact their calculus about empowering operatives with flexibility.

If al-Qa'ida's regional affiliates gain an increased foothold in their respective areas of operation, the leadership could feel the need to reassert their control and, therefore, would be more desperate for visibility. It could work the opposite way too. Al-Qa'ida's leaders could interpret such a development as easing the pressure on the overall al-Qa'ida brand, allowing them to be more selective about targeting and take calculated risks with highly skilled operatives.

D. The Leadership's Perception(s) of Previous Command and Control Outcomes

1. Previous Experience With Predetermined Command and Control:

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Failure:

The leadership would be mixed about this. On the one hand, the 9/11 attacks, which were heavily pre-determined, succeeded. As did the London bombings on 7/7/2005, which, while scaled back in terms of operational complexity, were still pre-determined. On the other hand, the group has had a difficult time executing attacks since. Some arguments that al-Qa'ida's leadership might currently have a problem with pre-determined roles and responsibilities include:

- Even when given specific orders and responsibilities, operatives are likely to deviate from the plan.
- Those deviations may be out of necessity (device does not detonate, operatives come into contact with law enforcement, other extenuating circumstances), which would force them to improvise.
- When operatives are forced to improvise and they are trying to follow pre-determined roles and responsibilities, they tend to revert to routine behavior, which can backfire. For example, the fourth 7/7 bomber, Hasib Hussein, after buying new batteries for his device which had failed to detonate, proceeded to the top of a double-decker bus (as he usually did when commuting) to detonate instead of maximizing casualties and damage by riding on the first level of the bus.⁸⁰⁸

At this point, al-Qa'ida cannot afford another failed attack. They must therefore make a determination between how much risk and uncertainty they are willing to tolerate. They can attempt to script out each role and responsibility, limiting the autonomy of individual operatives, in order to achieve an attack with the precise qualities they desire. Or, they can tolerate more uncertainty in order to grant operatives the flexibility needed to make any attack happen, even if not *the* attack al-Qa'ida's leadership had crafted. In the end, the decision between these two alternatives will rest on the need for *any* attack to maintain legitimacy versus

⁸⁰⁸ For more background on Hasib Hussein's mid-operation decision, see: Karen McVeigh and Esther Addley.

"7/7 Footage at Inquest Shows Final Bomber Hasib Hussain." The Guardian. October 14, 2010. <http://www.guardian.co.uk/uk/2010/oct/14/july7-bomber-cctv-footage-hussain>

the need for an attack with a specific profile.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Success:

- Their individual operatives are well-trained and vetted.
- The attacks they plan are imaginative and usually unexpected by their adversaries.
- They put months if not years into planning so that nothing unexpected should occur.
- The leadership are better about target selection and tactics, techniques, procedures than operatives
- The clerical leadership is better about knowing what targets are religiously legitimate and strategically significant.

At the time of the 9/11 attacks, al-Qa'ida was a centralized, hierarchically structured organization that had built a culture of command and control. The tolerance for uncertainty was low because they had the luxury of little security pressure, lots of time and easy access to resources. They were able to reduce as much uncertainty as they could, resulting in a success. Given that precedent, al-Qa'ida's old guard is likely still under the same mindset that time and planning equals reduction of unnecessary risk and uncertainty, which leads to operational success.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in an Indeterminate Outcome:

- Al-Qa'ida is now operating in a new security environment from when it conducted any major non-nuclear attacks. That elevated counterterrorism pressure and the multitude of newly implemented government security measures make it difficult for operational leadership to game every potential variable. Therefore, even prior experience could be seen by them to be indeterminate for the current situation.

Al-Qa'ida's leaders might believe that the organization was most effective when operatives took very clear and precise orders from the top down. These orders were given deliberately by a committee of religiously qualified men. Operatives are simply not religiously qualified to be able to assess the validity of an operational modification on the fly. Therefore, al-Qa'ida would believe that the best way to reduce unintended consequences, religiously and in terms of public relations, is to ensure that their people follow pre-determined arrangements.

Previously, al-Qa'ida has maintained a deep bench of qualified operatives. Constraints on staffing could be a major issue for the organization as it seeks to draw up plans for any future attacks. Previous pre-determined approaches are not necessarily reflective of al-Qa'ida's current human capital.

2. Previous Experience with Assertive Command and Control:

Arguments for Leadership Perceptions that Assertive C&C Resulted in Failure:

Al-Qa'ida leaders tend to be on one end of the spectrum or the other – either they are micromanaging, preoccupied with OPSEC issues and have a low level of trust in their operatives, or they believe that with the proper training and education, a hand-selected, vetted operative is capable in the field. The arguments they might make internally would likely center on OPSEC related issues.

- From al-Qa'ida's perspective, assertive command and control would open too many unintended opportunities for their adversaries, who they believe are constantly monitoring communications lines, to thwart an operation.
- If al-Qa'ida's operatives are waiting on orders from senior leaders who, due to the communications are located and neutralized mid-operation, the operation would fail and might not be recoverable.

Assertive arrangements could be viewed by al-Qa'ida as handicapping operatives. While in one way it reduces uncertainty by providing more linkages throughout an operation between the leadership and their operatives on the ground, it also creates new opportunities for the operation to be compromised. Consistent, steady, reliable and secure communications are not often possible in real-time, or advisable to risk for a senior leadership who are highly security conscious.

Al-Qa'ida's leadership is fully aware of the dangers that come with real-time communication. They have been historically conscientious about using low-tech solutions and human couriers instead of relying on technology for communicating with their affiliates. The logistical demands that an assertive arrangement would place on the organization and the potential for exposure seems to fly in the face of al-Qa'ida's approach to planning attacks.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Success:

The best example of this working effectively could be the 26 November 2008 attacks in Mumbai, India, where ten Lashkar-i-Taiba attackers from Pakistan were supported in real time from handlers inside of Pakistan.⁸⁰⁹ These attackers relied both on pre-planning through reconnaissance but also employed the assertive model where any major decisions in the field were coordinated by cell phone with their handlers.

Al-Qa'ida's leadership could see such an attack as a useful precedent, where their seniors who are in hiding could outsource operations to the leadership of local affiliate groups who are under less security pressure. These trusted commanders could still assert tactical control over an attack, which seems best modeled for active shooter scenarios and siege-style attacks, while remaining safe themselves.

Given the current security pressure they face, al-Qa'ida's senior leaders are likely to have a low tolerance for uncertainty and, therefore, look for other ways that they can mitigate their exposure. Although it is unclear how intimately al-Qa'ida has coordinated with affiliates and associates, outsourcing an assertive arrangement to a partner organization would be the most likely way that the Senior Leadership could maintain a semblance of control over their operatives without opening their operation to increased uncertainty.

Arguments for Leadership Perceptions that Assertive C&C Resulted in an Indeterminate Outcome:

Because al-Qa'ida's senior leaders have not employed the assertive command and control arrangement in any consistent or systematic fashion, they likely do not have a first-hand opinion on the arrangement.

Given the al-Qa'ida senior leadership's low tolerance for uncertainty, they are likely to not take the word of affiliates or associates, who may have previously employed this arrangement. Without first-hand, direct experience, given how high the stakes are for failure, they cannot make an informed assessment about how well assertive arrangements might work for them.

3. Previous Experience with Delegative Command and Control:

Arguments for Leadership Perceptions that Delegative C&C Resulted in Failure:

Al-Qa'ida's senior leaders have been failed time and again by affiliates, associates and operatives who take matters into their own hands. Unless absolutely necessary, al-Qa'ida's top commanders will likely be suspect of completely empowering their operatives.

- Operatives are likely to make poor tactical decisions due to inadequate training or incomplete information, particularly those who have not spent years on the front lines.
- Operatives could make tactical decisions that, while they might seem fitting to accomplish operational goals, could backfire strategically for the organization. Al-Qa'ida's preoccupation with decision-making by committee is completely anathema to individual decisions on the fly.
- Operatives are not well informed on the religious prescriptions and proscriptions about the use of violence and ought not to have that level of autonomy.

This arrangement is the one that maximizes the level of uncertainty and risk for al-Qa'ida's leadership. It is probably not one that would be implemented as doctrine under Zawahiri, but is the kind of call that has been made from the affiliate, Al-Qa'ida in the Arabian Peninsula's English-language media efforts, as well as

⁸⁰⁹ Noah Shachtman. "How Gadgets Helped Mumbai Attackers." Wired.com. December 1, 2008. <http://www.wired.com/dangerroom/2008/12/the-gadgets-of/>

individuals within the al-Qa'ida senior command, including Adam Gadahn.

Leadership perceptions of effectiveness and validity are the deciding factor. Under Zawahiri, even if a delegative command and control arrangement was implemented, it would likely be done half-heartedly because he has no record of calling for individual, autonomous action. Abu Yahya al-Libi, in contrast, had been openly calling for open and wide-ranging assault on enemies from the bottom up before he died.

For Abu Yahya and those who still advocate his positions, the battle has transcended al-Qa'ida. According to Abu Yahya,

"Therefore, we do not link our jihad to any organization, commander, sect, name, or land, even if it was the sacred land. No land makes a man sacred; his deeds do. We should perform this worship and fight the enemies of God whenever we have the chance, whether it be in Afghanistan, Pakistan, Somalia, Iraq, Algeria, Syria, or Libya. It does not matter where; what matters is to follow the path that pleases God the Almighty."⁸¹⁰

Arguments for Leadership Perceptions that Delegative C&C Resulted in Success:

Al-Qa'ida's experience with delegative command and control arrangements has been limited. In the cases where they have directly employed it, they would likely believe that it can be successful because:

- Individual operations can be spun in their propaganda as a more accessible model that their global movement can emulate. In that case, they would likely believe that they could empower more people in more places to conduct attacks under al-Qa'ida's umbrella.
- Delegative arrangements are more in line with the initial 'death by a thousand cuts' strategy that al-Qa'ida originally hoped to spark.
- This arrangement could actually position al-Qa'ida to claim responsibility for any/all independent cells and actors who conduct attacks in line with their guidance.
- Judging by the success that Anwar al-Awlaki had with his followers, including Nidal Hasan or Roshonara Choudhry, a delegative arrangement could be an inexpensive, highly effective means of outsourcing global terrorism.⁸¹¹

The delegative approach would be favored by those who believe that transcending established organizational limitations is the best way to ensure that the progress al-Qa'ida has made is not squandered. Abu Musab al-Suri, who advocated a "system of individual jihad" whereby cells operating from the same baseline intent would organically appear and dissolve, is a leading theoretician/strategist advocating delegative approaches. Other advocates include Adam Gadahn, Anwar al-Awlaki, the Inspire Magazine under Samir Khan and increasingly over time Abu Yahya al-Libi. The advocating of a decentralized model is precisely where some in the movement have been pushing. Uncertainty, in this case, is something to be embraced rather than feared.

Abu Musab al-Suri's release from Syrian prison could revitalize the al-Qa'ida global movement into embracing the decentralized, delegative model, as could AQAP's resuming the Inspire Magazine without Awlaki or Khan.⁸¹²

Arguments for Leadership Perceptions that Delegative C&C Resulted in an Indeterminate Outcome:

There have been few pure delegative C2 models to which al-Qa'ida proper can refer. Self-starter cells and homegrown attacks are so far along the delegative spectrum that they probably do not count in the eyes of

⁸¹⁰ Abu Yahya al-Libi, "Id al-Adha Sermon, 1432," *As-Sahab Media Establishment*, December 29, 2011.

⁸¹¹ Christopher Heffelfinger, "Anwar al-'Awlaqi: Profile of a Jihadi Radicalizer," *CTC Sentinel*, Vol. 3, No. 3 (March 2010), pp. 1-4. Available at: <http://www.ctc.usma.edu/wp-content/uploads/2010/08/CTCSentinel-Vol3Iss3-art1.pdf>

⁸¹² For more discussion about al-Suri's possible release, see: Jason Lewis, "Syria releases the 7/7 'mastermind,'" *The Telegraph*, February 2, 2012. Available at: <http://www.telegraph.co.uk/news/uknews/terrorism-in-the-uk/9061400/Syria-releases-the-77-mastermind.html>

the leadership. Therefore, al-Qa'ida likely views any previous instances as either anomalous or unrepresentative of the ideal-type that they would be indeterminate as a predictor for success.

4. Leadership Perception of Outcomes Based on Command and Control Arrangement Type

Predetermined Final Estimation:

At this point, from al-Qa'ida's perspective, a pre-determined arrangement would probably result in success. From what the old-guard within al-Qa'ida is used to, this provides the most strategic control and minimizes the most risk and uncertainty.

Assertive Final Estimation:

Al-Qa'ida's leadership likely believes that an assertive command and control arrangement could succeed in the case that communication lines were secure and they did not lead back to their commanders acting as handlers. It would probably be viewed as too risky for them, however, unless it was outsourced to an affiliate group – say Tehrik i-Taliban – who would have the tactical know-how, strategic sensibility and the hunger to claim credit for an attack that they would be willing to run the risk when al-Qa'ida would not. In the absence of knowledge of specific parameters, then, it is likely that they would view this as indeterminate.

Delegative Final Estimation:

Under Ayman al-Zawahiri, the delegative model is probably more problematic than it is worth. It is anathema to his decades-long career doing terrorism. He has witnessed more operations backfiring when leadership is less engaged than not. If Zawahiri is replaced by someone more along the mindset of Abu Yahya al-Libi, who is more comfortable transforming al-Qa'ida into an intellectually guided killing movement, delegative arrangements would be considered much more in line with long-term strategic goals. However, the current estimate is failure,

5. Factor Weight:

For al-Qa'ida's senior leadership, a great deal seems to hinge on the personality, experiences and influence of the current leader.

6. How this factor might change in the next five years.

Given the high rate of turnover in al-Qa'ida's top ranks, there is a strong likelihood that Ayman al-Zawahiri will be killed or captured during the next five years. With no known viable deputy in place, it is difficult to speculate about the most likely scenario for leadership transition. If Zawahiri's replacement is concerned more with staying alive and keeping al-Qa'ida alive, even if it is at a low level, then they are likely to take a more centralized, micromanaged approach – much like the current regime. If, however, they have come of age as a leader in recent years, they could be more along the lines of an Abu Yahya al-Libi or Adam Gadahn in that they approve of more flexible command and control arrangements. If they are charismatic and have strong relationships with associates, such as the TTP or other Pakistani based militant networks, they may be able to creatively leverage relationships to both enhance al-Qa'ida's targeting capacity while ensuring the safety of the senior ranks.

E. The Leadership's Perception: Complexity of Getting a Working Weapon to the Target (U.S.)

1. Arguments for Perception of High Complexity:

- Without internal expertise, al-Qa'ida would have to acquire the device from a third-party. That weapon would either have to be moved to storage or immediately deployed.
- If a third-party were to provide expertise instead, al-Qa'ida would have to move the experts and the components. Moving multiple components means that there is a higher likelihood of government intelligence agencies finding out.
- Given that the likely target would be a Western country, and most likely the United States, al-Qa'ida would face a daunting task smuggling a nuclear device into the country.

The leadership would face a massive amount of uncertainty in acquiring, organizing and deploying a device. The amount of opportunities for the operation to be compromised is, therefore, quite high. The leadership

would have to be willing to accept a high degree of uncertainty in order to let the mission play out. There is precedent for both in al-Qa'ida's history.

Even merely getting the device to the target would entail an enormous amount of effort and luck. Ensuring that it actually goes off in the desired location as defined above adds considerable complexity. The leadership would invariably define any outcome as success but some would be received more authentically than others. In the case of a fizzle, al-Qa'ida would still be able to get considerable mileage out of the fact that they were able to secure a nuclear device and transport it to a desired target.

The leadership, already concerned with cell penetration, OPSEC missteps or squandering a rare opportunity, would likely perceive that the best way to handle an operation of this magnitude is to exert as much planning and coordination from above as possible. Particularly if Zawahiri is still emir, each step would likely have to be highly scripted, performed by highly trusted operatives with very clear pre-defined roles and responsibilities. Thus, the operation would have to be extremely complex and would have a number of potential points of failure.

2. Arguments for Perception of Medium Complexity:

There is a high likelihood that the leadership could vacillate between finding the challenges of acquiring and delivering a nuclear device to an intended target inside the United States as prohibitively complex.

- With the right training and preparations, good operatives will be able to overcome the logistical challenges that are likely to be involved with moving a device to its target.
- God is willing success so adversity must be dealt with head on.

The latter stages of the operation are likely to be rife with uncertainty. Just to proceed with such an operation means that the leadership has already accepted a medium degree or more of uncertainty. The question comes down to the degree to which the command and control arrangement, the individual operative's training and the help they receive from God helps them overcome that uncertainty.

If the leadership believes that there is a medium degree of complexity involved in moving a device to its target, it means that they have likely made a cost/benefit calculation. Ayman al-Zawahiri is notoriously meticulous in considering his options and has likely instilled that approach in his remaining lieutenants. The leadership has probably accepted the likelihood that the device could fizzle but still determined that the benefits of getting the weapon to its target outweighs the potential pitfalls of a misfire or mistimed detonation.

There is really no precedent that the leadership would have for moving a nuclear device to its target. Previous C&C arrangements simply pale in comparison given the challenge of transporting a radiological weapon, particularly in an urban area. Given the lack of direct experience, the leadership would likely employ the arrangement that they feel most comfortable with, not necessarily the one that is most appropriate for the situation.

3. Arguments for Perception of Low Complexity:

The only way that the leadership would view this is if they acquired the device from within the target country, proximate to their final target. Otherwise, this is not a realistic option. Al-Qa'ida's leadership takes the complexity of planning a terrorist attack very seriously.

4. Final Estimation:

The leadership will view the acquisition and deployment of a nuclear device as a highly complex operation.

5. How this factor might change in the next five years.

There really is no factor that could change this. Even if a nuclear device fell into al-Qa'ida's lap, they would still have to move it into position. Given the perceived pervasiveness of radiation detector sensor networks,

moving a device into the United States or another high-value Western target (such as the UK) would be a daunting task.

F. Leadership's Perception of the Trustworthiness of Relevant Group Members

1. Arguments for Perception of High Trustworthiness:

Al-Qa'ida has had some issues with trustworthiness among their operatives. Abu Yahya al-Libi was of the belief that punishment for treason to al-Qa'ida had to be a brutal death. Not all leaders, however, have been as outspoken or preoccupied with the issue. Al-Qa'ida's old guard would likely be of the mindset that the organization has carefully vetted and trained their operatives. Those who remain in the group are likely trustworthy, making the likelihood of infiltration quite low in the eyes of someone like Ayman al-Zawahiri.

With the amount of effort US and other intelligence services are placing on collapsing al-Qa'ida, all new members have a high level of questionable loyalty. However, given the current high level of tolerance, this may not be as significant an issue as it objectively should be for the Senior Leadership.

The requirement to successfully detonate the nuclear weapon in the time and place of its choosing places an enormous pressure on the Senior Leadership to choose team members that have extensively proven their loyalty. Therefore any operational team assembled would likely have to consist of long-term members.

2. Arguments for Perception of Medium Trustworthiness:

None – you are either trusted or you are out.

No room for middle ground on this issue.

3. Arguments for Perception of Low Trustworthiness:

In this unprecedented era of security pressure, nobody in the field can be completely trusted.

Abu Yahya al-Libi's repeated warnings about the danger of spies among the ranks of al-Qa'ida's leadership have been internalized by al-Qa'ida. In an era of low tolerance for uncertainty given the security pressure, the leadership cannot help but to heed those warnings. An argument could be made that the leadership has low trust in its operatives and, therefore, would try to control them as much as possible in order to limit all possible unintended outcomes.

If the leadership views operatives as being potentially untrustworthy, then they would likely define success more broadly. In short, the longer duration that the operation can go, the more of a success it is likely to be viewed, from the perspective of a leadership that does not trust its operatives.

4. Final Estimation:

The leadership is likely in lock-down mode. Between Abu Yahya al-Libi's intense paranoia about internal leaks and spies, and Zawahiri's historical concern with operational security, there is likely a tight code of compartmentalization implemented in the group, keeping the operational unit's numbers down and hierarchical command and control arrangements in place. The estimate is therefore low.

5. How this factor might change in the next five years.

There are unlikely to be any major changes in the Senior Leadership's perception of the trustworthiness of the members. However, given the ongoing targeted killing campaign, the supply of veteran members who have proven their loyalty will likely gradually decline.

G. The Leadership's Perception of the Reliability and Security of Communications

1. Arguments for High Reliability and Security:

None.

2. Arguments for Medium Reliability and Security:

None.

3. Arguments for Low Reliability and Security:

- Virtually all electronic communications channels have been compromised or could be easily if the proper operational security precautions are not taken.
- Human couriers are the only reliable way of communicating; however, even those are now in question given the bin Ladin experience.

There is no room for uncertainty with communications. AQSL perceives high complexity and low reliability for communication channels. Therefore, they are likely to prefer operational plans that require as little mid-operation communication as possible, even though this would require giving operatives higher levels of autonomy and flexibility than in previous attacks.

In short, empowering operatives or pre-assigning them is going to be seen as better for OPSEC than the assertive approach.

4. Final Estimation:

Communications reliability and security is perceived as extremely low.

5. How this factor might change in the next five years.

As al-Qa'ida's personnel continue to be removed, so too will their infrastructure degrade and the robustness of their contacts come into question. The loss of the linkages holding this network together will likely prove the death of the al-Qa'ida organization over the next five years, making affiliate networks more important.

H. The Leadership's Perception of Group Competency

1. Arguments for Perception of High Competency:

A good cell leader is hard to find. Muscle is easy. Explosives construction is harder but still not in short supply. But an intelligent operative who can command a cell in the field, improvise when necessary, and who has the intelligence and cultural fluency to pull off an operation in the West requires a special personality: Muhammad Atta or Muhammad Siddique Khan are good examples.

2. Arguments for Perception of Medium Competency:

None.

3. Arguments for Perception of Low Competency:

There is no way that al-Qa'ida's leadership believes that it has anything but a low competency when it comes to nuclear devices. They have been unable to build or acquire one in their 20-year history. They have no known technical experts. Any competency that the group was to gain in this arena would have to be imported.

The training and knowledge of the AQSL's specialists are not compatible with those skill sets required for the successful deployment of a nuclear device.

It would be highly risky to bring in a "technical expert" at this point in their history. However, given the high tolerance for uncertainty and risk, this might be acceptable.

The current leadership would likely pass on something so technically sophisticated and opt instead for a conventional explosives attack, which they feel more comfortable with and have technical expertise in-house.

Even if they are of pure mind, they may inadvertently draw attention to the plot, may be followed, tracked, etc. In the aftermath of the bin Ladin raid, where the press has been very open about how the US followed one of bin Ladin's couriers, nobody can be completely trusted any more.

Pre-assigned or delegated removes the chance of communications being tied back to the senior leadership; within both of these arrangements operatives act autonomously (one according to a script, the other according to their best judgment). Assertive is the worst for OPSEC, as it opens too many avenues for compromise.

4. Final Estimation:

The group leadership would likely view their internal competency on nuclear issues to be low. They may deem their ability to deploy that device as higher, but based on 20 years of precedent, their ability to acquire or develop a device would be seen as low.

5. How this factor might change in the next five years.

The core technical competency of AQSL is not expected to change in the next five years.

I. Leadership's Perception of Existential Threat(s) to the Group

1. Arguments for Perception of High Existential Threat:

- Most of the senior leadership has been killed in recent years.⁸¹³
- There have been no replacements of al-Qa'ida's messaging personnel, leaving a deafening silence in terms of al-Qa'ida propaganda.
- Financially, al-Qa'ida is reported to be in dire straits.
- Freedom of movement has been significantly restricted due to ongoing operations and increased counterterrorism pressure.

The group's ideology would stand in contrast to a recognition that they are facing an existential threat. Al-Qa'ida believes that they have been chosen by God to fulfill the destiny of the strangers (al-Ghuraba). They are the Victorious Group (at-Taif al-Mansoura). Therefore, no matter what, they believe that they will invariably prevail with the help of God. From that perspective, there is an unyielding belief that pervades the leadership's public pronouncements that success has or is close to being achieved. They have begun to articulate that al-Qa'ida will transcend individual leaders and even the organization itself. That suggests that, at least organizationally, the leadership believes there is a serious and very real possibility that they will be eliminated soon.

Al-Qa'ida has been quite open about their financial challenges, noting in numerous statements that they need support from their movement. They would also view their declining public support numbers as a major vulnerability. They see the Arab Spring as a short-term vulnerability for them because it further marginalizes them in debates within the Islamic world and emphasizes the fact that predominantly non-violent forms of revolution can be more effective than terrorist attacks.

Al-Qa'ida seems to believe that, if they take the appropriate precautions, their adversaries will not find out about an attack until it is upon them. For that reason, despite their belief that the CIA and Mossad have agents in all corners of the world, they would not see their position as being compromised without cause.

Al-Qa'ida probably believes that any detonation of a nuclear device in the United States would be met with ruthless military action. While they might believe that such aggressive overreaction might be harnessed for propaganda success, there is also the chance that deploying a nuclear device would spell their end.

Al-Qa'ida may or may not believe that the US currently has retaliation targets in mind – otherwise they likely

⁸¹³ The most prominent senior leaders who have been removed from al-Qa'ida include Usama bin Ladin, Atiyah Abd al-Rahman al-Libi, Abu Yahya al-Libi, Mustafa Abu al-Yazid in addition to a host of other senior ranking commanders and associates. For more information about the damage that has been inflicted to al-Qa'ida's senior ranks, see: Peter Bergen. "And Now, Only One Senior Leader Left." CNN.com June 6, 2012. http://articles.cnn.com/2012-06-05/opinion/opinion_bergen-al-qaeda-whos-left_1_abu-yahya-aqap-drone-strikes?_s=PM:OPINION

would have struck said targets – but they would be foolish to think that the US would not do everything in its power to identify viable targets and strike them in the aftermath of such an attack.

US and allied targets care less about infrastructure and more about individuals. The viable targets would only be identified through a massive upsurge in drone reconnaissance, which would virtually eliminate al-Qa'ida's freedom of movement.

They would probably lose all state sponsorship. If Iran helped acquire or deploy a device, they would likely deny it. Any Arab supporters they may still have would view the situation as too politically toxic to offer any support. In other words, a successful nuclear detonation would officially isolate al-Qa'ida from the rest of the international community and many of its affiliate/partner organizations who would be too worried about being caught up in the aftermath.

The Taliban's hand would be likely to reduce significantly or cease any kind of collaboration or protection of al-Qa'ida's remaining leaders.

2. Arguments for Perception of Medium Existential Threat:

- If viewed as their organization's ability to survive a counterterrorism onslaught, then they are probably fairly sober about the likelihood of being killed in the near term and watching their vanguard organization collapse due to lack of manpower.
- However, if viewed as the continued resonance of their message or the appeal of their ideology, then they likely believe that it will survive individual losses and even the collapse of the organization in its current form.

The reality is that they probably think about both simultaneously and, therefore, would be classified as having medium fear of existential devastation.

3. Arguments for Perception of Low Existential Threat:

If al-Qa'ida's senior leaders have convinced themselves and their organization that God's plan for them is to die in the line of fire, then the only way that al-Qa'ida lives is for them to die. In that case, there would be little reason to try and hold on to the vestiges of a collapsed organization that has used its own martyrdom to popularize the cause for a global following. This could be understood as something of a "martyrdom mindset," where dying is actually desirable and a metric of success.

The only way that individuals could maintain this mindset is through an ideology that systematically reinforces and rationalizes death as a form of life, one for them as individuals but also the power of their ideas. This ideology has to fundamentally transform the way that individuals understand themselves, their goals and their life. It requires intense rewriting of one's basic logic, which is possible when individuals come into the movement desperate for meaning, purpose and success.

The leaders would be simply relying on a totally different set of metrics about what constituted vulnerabilities if they saw themselves as having a low existential threat as defined above at this point. To many, it would seem delusional. But it is possible that al-Qa'ida, because of their ideological predisposition, could believe that they do not face an existential challenge, despite the overwhelming evidence to the contrary.

As long as they were able to deploy it, the backlash itself would be irrelevant if the organization has already transcended itself.

4. Final Estimation:

In this case, the pragmatists among al-Qa'ida likely see the end creeping up upon them. The more ideologically focused leaders are probably of the medium mindset, trying to find the transcendental impact and relevance that they will hold for the global movement and in history than their individual lives or that of the group itself. The estimate is thus medium.

5. How this factor might change in the next five years.

It is unlikely to change.

J. Leadership's Preference for "Failure"

1. Arguments for Preference for Fail Deadly:

If al-Qa'ida believes it is facing physical annihilation, it may prefer any detonation, regardless of location, in the hope that any detonation could serve to solidify their legacy, inspire more recruits and inspire fear in its adversaries.

If the group believes that they are within their religious rights/authorities to deploy a live nuclear device, so long as it does not expressly target Muslims, then they would likely not view a failed detonation as failure unless it occurred in an Islamic country. Under the current leadership regime, they would take all available measures to insure that there was no chance that the device would accidentally detonate in the Middle East. The religious punishments against them for committing such an act, even if by accident, would be nothing short of reprehensible. In short, they would be sentencing themselves to eternal damnation.

They may also believe that any detonation solidifies them as the premiere terrorist organization operating today, which could cement or shore up ties with other groups who question al-Qa'ida's current relevance to the cause. AQSL has demonstrated a previous tolerance for large numbers of collateral damage within its constituencies. Given this relatively loose linkage, a fail deadly posture would be acceptable.

It could energize financiers to see al-Qa'ida procure a nuclear weapon or scare them away, in that ties to al-Qa'ida would be too damaging politically. It is unlikely that any of AQSL's funders would be supportive of a nuclear detonation in Muslim lands, thus fail deadly would be an unattractive posture from this perspective.

Location is the primary variable to focus on in this scenario. Al-Qa'ida could spin any detonation of a nuclear device outside of the Middle East in its favor. It would be signing its own death warrant, however, if the device detonated in the Middle East.

2. Arguments for Preference for Fail Impotent:

- If the device is exposed in transit through an Islamic country.
- Possession of a viable weapon is still a major public relations coup
- Detonation on Muslim lands would be extremely damaging to AQSL with little or no benefit

There are few reasons that al-Qa'ida would be able to justify having a nuclear device and not exploding it. However, the imperative to minimize constituency costs will likely override any other ideological drive to action.

Despite previous acceptance of massive collateral damage, Zawahiri has emphasized the importance of AQSL maintaining more positive relations with its constituencies, particularly after bin Ladin's death. He and most of the senior leaders have expressly proscribed any major attack that could lead to the death of innocent Muslims in multiple statements in recent years. Furthermore, Zawahiri is perhaps the most attuned leader to the importance of keeping al-Qa'ida's constituencies supportive of the overall mission. He would view any detonation within an Islamic country as directly subversive to al-Qa'ida's ability to capture and retain the hearts and minds of their associates, affiliates and supporters.

The revelation of possession of a viable nuclear device, even if it did not detonate, would likely revitalize AQSL's position at the vanguard of the Islamist movement in the eyes of potential donors so long as the jihadist intelligentsia did not rule the detonation as being against Islamic law. If that was the case, the mere mention that al-Qa'ida was pursuing a nuclear device if deemed against Islam could shut down what funding is currently keeping al-Qa'ida afloat.

A state sponsor would likely insist on a more aggressive posture to ensure that no forensic evidence would be traced back to it, thus reducing the risk of retaliation for providing a nuclear weapon.

3. Final Estimation:

In most conceivable scenarios, the leadership would prefer a fail deadly outcome. Being double-crossed, having a complete leadership reversal of position after a device has been deployed, and having the device be compromised in an Islamic country are the exceptions leading to a preference for fail safe. Having acquired such a device and not detonating it, would provoke a public backlash and the group would not receive the enduring propaganda credit that they hoped for. The general estimate is thus a preference for fail deadly.

4. How this factor might change in the next five years.

The primary reason al-Qa'ida would hope that a nuclear device would fail to detonate would be in a scenario in which certain conditions changed from the time the operation was ordered to the actual deployment of the device and al-Qa'ida lacked the ability to call off the attack remotely. This failure to call off the attack would likely be the result of compartmentalization in order to assure operational security and protection of senior leaders in case an operative would be apprehended and interrogated. An unexpectedly changed agreement or partnership that had been in play during the time of initiation is one possible example of aforementioned changing conditions.

III. Conclusion

Overall, based on all current knowledge of the group what type of nuclear C&C do you think the group would employ and why?

Al-Qa'ida would most likely choose a pre-determined form of governance, allowing its operatives limited flexibility in the field with some sort of continuity in command and control. Recognizing that communications lines were limited, they would likely outsource the active handling of the operatives to a compartmented cell or affiliate organization in order to protect themselves. But the goal would be to streamline the deployment logistics so that minimum contact was needed, which they believe are only opportunities for intelligence services to thwart their plans. The plot would likely involve support from a state such as Iran or rogue officials from Pakistan, and would see the device moved into a Western country, ideally the United States but any Western country would suffice – the UK would be more viable. There would be virtually no reason for al-Qa'ida to try and turn off the attack once it was underway and, should the device be compromised in transit, they would ideally like it to detonate in the West and not detonate if still in an Islamic country.

Profile 5: US Homegrown Cell

“The Atlanta Five”

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I. Pre-Analysis

A. General Background of the Group

Despite the dozens of cases of American homegrown jihadist-inspired terrorism over the past decade, there has been no single homegrown violent extremist group that is ideally suited for this exercise.⁸¹⁴ Instead of focusing on a single group, a fictional composite cell, referred to as “The Atlanta Five,” has been developed for the purposes of understanding the perspective of an American homegrown jihadist terrorist cell vis-à-vis nuclear terrorism. Its leaders, members, behaviors, goals and capabilities are inspired by the details of real-world events. In other words, the “Atlanta Five” is a fictional recreation of the most useful elements from the past decade of domestic jihadist cells.

This fictional cell emerged in early 2010 when two American males, who were born in Pakistan but relocated with their families to the United States in grade-school, became radicalized.⁸¹⁵ The radicalization process has been subject to extensive analysis in recent years within the counterterrorism community. It typically involves a process by which individuals begin to redefine themselves out of their existing communities and instead through a pan-Islamist lens wherein the suffering and tragedies of Muslims around the world become identified as their own. The strength of al-Qa’ida’s ideology is creating a template wherein individuals can project themselves globally: an attack on a Muslim anywhere is an attack against them. Similarly, al-Qa’ida’s template has ensured that individuals believe that an act of resistance, no matter how local or strategically insignificant, is itself a symbolic contribution to the global cause. Attacking a target in the United States, for example, can be an act of vengeance for what a radicalized individual believes to be an unjust attack against a Muslim across the world.

A key part of al-Qa’ida propaganda, much of which individuals access by way of the Internet, reinforces the dichotomous nature of today’s world in their eyes.⁸¹⁶ In this process, they may begin to believe that the world can only be divided into absolutes: good and evil, freedom and oppression, truth and falsehood. After spending extensive hours online interacting on extremist discussion forums, Facebook pages and watching YouTube videos, in addition to reading extremist literature, the two fictional cell leaders profiled in this

⁸¹⁴ For a useful review of the common trends of recent homegrown terrorist plots, see: Brian Michael Jenkins, “Would-Be Warriors: Incidents of Jihadist Terrorist Radicalization in the United States Since September 11, 2001,” RAND, 2010. Available at: http://www.rand.org/pubs/occasional_papers/2010/RAND_OP292.pdf

⁸¹⁵ The use of a tie-back to Pakistan is rooted in the number of radicalized individuals in the West who have had some connection to militant organizations operating from Pakistan. Consider David Coleman Headley, a Chicago-based Pakistani American, who conspired with Lashkar-e-Taiba, making multiple trips between the United States and Pakistan. Or see the example of the cell known as the D.C. 5 who journeyed to Pakistan and were detained on December 9, 2009, during a police raid on a house with links to a militant group.

⁸¹⁶ Mohamed Alessa and Carlos Almonte, who attempted to join the Somali al-Qaida linked terrorist group, Al-Shabaab, began their radicalization path online. By downloading al-Qaida videos and related propaganda, they came to redefine themselves, their goals and their commitment to using violence. For more, see: *U.S. v. Mohamed Alessa and Carlos E. Almonte*, Criminal Complaint, Magistrate No. 10-8109 (MCA), U.S. District Court, District of New Jersey, June 4, 2010, p. 11, <http://www.scribd.com/doc/32643121/US-v-Alessa-and-Almonte>. Hereinafter: *U.S. v. Alessa and Almonte*, Criminal Complaint.

example came to a decision to live up to their responsibility of taking their belief in the need for active, violent resistance to the next level of commitment.⁸¹⁷

The two cell leaders in this example were able to engage contacts with the Pakistani Taliban, the Tehrik-i-Taliban, travel there to receive rudimentary training, strategic direction and were instructed to return to the United States in order to begin plotting an attack in the U.S.⁸¹⁸ Upon their return, during the summer of 2010, the two cell leaders began reaching out to three of their closest friends, seeking to recruit them into their cell.

The cell's activities were limited to online participation and in-person meetings to review al-Qa'ida propaganda videos and engage in ranting sessions about U.S. foreign policy, particularly toward Israel, and their continued support for Arab dictatorships.⁸¹⁹ It was during summer 2011 that the cell began to seriously discuss potential targets in the United States, which was a decision spearheaded by the two cell leaders.

In this premise, the cell is assisted in the acquisition of a nuclear device by their overseas handlers. They do not have detailed information about the source of the weapon as much of this operation has been compartmented. They are being viewed as the operatives on the ground meant to take possession of the device, perform any limited technical adjustments in order to activate the device and then guide it to its target without being intercepted. The cell leaders have similarly compartmented the true nature of the device from their own members for fear of being compromised.

B. Identification and Brief Exploration of the Group's Key Decision Maker(s)

The two cell-leaders of this group, both in their early twenties, were viewed by their families as being well-adjusted, average young men prior to their trip to Pakistan. Afterwards, however, they began to make noticeable changes in their demeanors and external presentations. Homegrown radicals tend to go to one extreme or the other, gratuitously displaying their commitment to a more puritanical reading of Islam or masking it entirely. This behavioral shift can often happen, as in this case, following a trip to an Islamic country. American second and third generation Muslims can rediscover a sense of authenticity and connectedness to a community that they did not feel in the United States. Upon their return, as is the case with many individuals who travel overseas, they attempt to use shifts in their behavior as a way to maintain that connectivity to their idealized cultural roots.⁸²⁰

⁸¹⁷ "Violent Islamist Extremism, The Internet, and the Homegrown Terrorist Threat United States Senate Committee on Homeland Security and Governmental Affairs." Majority & Minority Staff Report, Joseph Lieberman, Chairman, May 8, 2008. Available at: <http://www.hsgac.senate.gov/imo/media/doc/IslamistReport.pdf?attempt=2>

⁸¹⁸ Similar to Faisal Shahzad, a naturalized U.S. citizen who was born in Pakistan and returned there to obtain training before attempting to detonate a vehicle borne improvised explosive device in Times Square in 2010. For more, see: Ron Scherer, "Life sentence for Faisal Shahzad, could join shoe bomber in Colorado," Christian Science Monitor, October 5, 2010. Available at: <http://www.csmonitor.com/USA/Justice/2010/1005/Life-sentence-for-Faisal-Shahzad-could-join-shoe-bomber-in-Colorado>

⁸¹⁹ The case of Emerson Begolly provides useful insights into how American supporters of al-Qaida use the Internet to access propaganda and network with likeminded believers. For more, see: Siegel, Hannah, "Nazi Buff Turned Jihadi Allegedly Bites FBI Agents," ABC News, January 6, 2011. Available at: <http://abcnews.go.com/Blotter/nazi-buff-turned-jihadi-allegedly-bites-fbi-agents/story?id=12557232#.UCOscKDaKSp>

⁸²⁰ For more on the kinds of behavioral and attitudinal shifts common in the radicalization process, see: Gary LaFree, "Terrorist Attacks Against the United States Homeland from 1970 to 2007," p. 57, in Appendix B, "Community-Level Indicators of Radicalization: A Data and Methods Task Force," Report to Human Factors/Behavioral Sciences Division, Science and Technology Directorate, U.S. Department of Homeland Security," National Consortium for the Study of Terrorism and Responses to Terrorism, College Park, MD, February 16, 2010. Available at: http://www.start.umd.edu/start/publications/START_HFD_CommRadReport.pdf.

In this case, the close peer network of the cell leaders began to see in their friends a rapid shift to a militant, zero-tolerance form of Islam. This commitment was reflected in their dress, their interactions with non-Muslims, their growing belligerence at mosque, and their attitudes towards women.⁸²¹

The first of the two cell leaders is 25 years old, married with one small child. Serious in demeanor and introverted, he became increasingly dedicated to practicing Islam in 2008. He quickly grew frustrated by what he believed to be was a watered-down version of Islam from the local mosque and looked online for further guidance.⁸²² After finding Sheikh Anwar al-Awlaki and others, he decided that the only true form of Islam was the one preached by al-Qa'ida. Through listening to online sermons and participating in online discussion forums, he developed a clear sense for what the proper version of Islam needed to be.

The second cell leader was 23, single, a college graduate, and family friend to the first cell leader. Known to his friends as the typical American kid throughout high school, he was fun loving, athletic and showed no real interest in a fundamentalist understanding of Islam. It was not until his close friend began pushing a more hardline version of Islam that he started question his own religious identity and consequent duty.

Generally speaking, homegrown jihadist cells tend to pale in comparison in their knowledge of tactics, techniques and procedures to cells that have been more formally trained in al-Qa'ida camps. According to the Congressional Research Service,

Homegrown violent jihadists, some say, possibly lack deep understanding of specialized tradecraft such as bomb making. They may not have the financing, training camps, support networks, and broad expertise housed in international organizations. These apparent shortcomings may keep some homegrown violent jihadists from independently engaging in large-scale suicide strikes. Because of this, they may turn to violence requiring less preparation, such as assaults using firearms.⁸²³

In this case, cell leader 1, the more militant of the two, had thrown himself into the mentality of “being al-Qaida” upon deciding to commit himself to this version of Islam. Although he did not have a four-year degree, he had a two-year technical degree in computer networking and had a job with a local business. Neither reflective nor intellectual, his study of radical jihadist texts was mechanical, and he accepted them at face-value. He had never faced combat or joined the military, nor was he very athletic.

Cell leader 2 was dedicated but less interested in the philosophical dimension of religion. For him, the motivating factor that moved him from a more passive to active practicing of Islam was his political views, particularly his feelings about American support for Israel. Almost two different people, he was active in community soccer club, maintained a broad group of friends and was employed. But when discussions about politics or foreign policy began, he became a different person, lecturing feverishly about the hypocrisy of American policy.

In previous homegrown cells, the primary cell leader tends to be heavy-handed and occasionally quick

⁸²¹ For more on behavioral shifts and indicators of radicalization in Western contexts, see: Mitchell D. Silber and Arvin Bhatt, “Radicalization in the West: The Homegrown Threat,” New York City Police Department, 2007. Available at: <http://www.voltairenet.org/IMG/pdf/NYPD-2.pdf>

⁸²² For a more in-depth look at models and pathways of radicalization, see: John Horgan, “From Profiles to Pathways and Roots to Routes: Perspectives from Psychology on Radicalization into Terrorism,” *Annals of the American Academy of Political and Social Sciences*, Vol. 618, No. 1 (2008), p. 80-94. Available at: <http://ann.sagepub.com/content/618/1/80.full.pdf+html>

⁸²³ Jerome P. Bjelopera, “American Jihadist Terrorism: Combating a Complex Threat,” Congressional Research Service, November 15, 2011. Available at: <http://www.fas.org/sqp/crs/terror/R41416.pdf>

tempered. For example, Muhammad Bouyeri, a member of the Hofstad Group that killed Dutch filmmaker Theo VanGogh in November 2004, was known for his violent temper.⁸²⁴ According to the NYPD report on homegrown radicalization,

“Mohammed Bouyeri was born in West Amsterdam, the son of Moroccan immigrants. He was described as a cooperative and promising second generation immigrant in Holland by some people who knew him at this stage. He attended a local polytechnic to study accounting and information technology, but reportedly spent a lot of his time on the streets. He had a reputation for a quick In this case, Cell Leader 1, the older and more serious of the two, naturally assumed the role of the coordinator for the cell. Leader 2 did not find the organizational dynamics of establishing a covert cell compelling and was happy to defer to his colleague. Again, given that neither of these individuals had much life experience or background managing teams of individuals, much of their approach was ad hoc. This can differ from cells who have had extensive training in operational security and have been a part of more tightly managed cells themselves.

Each individual assumed a different approach when it came to interacting with the other three members. For cell leader 1, entry into the cell was serious business. They had to obey, comply with his operational security, and agree to defer to his authority. Cell leader 2 approached matters far more collaboratively, seeking to enjoy the time he was spending with people who shared his anger at the United States. Again, for leader 2, the idea of being a terrorist never really consciously crossed his mind. He was just more interested in the participation, the debates and the feeling of significance that he gained from realizing that he was on a path of action and not inaction. Leader 2's easygoing nature was helpful with the other three members but it took the discipline and commitment to operating a covert cell by leader 1 in order to make the cell logistically function.

For cell leader 1, risk was something that he took very seriously. He believed that risk could be calculated and minimized by taking the proper steps. His attraction to the online forums was that they contained a host of literature to help him think about the process of operating a covert cell. However, he was consistently paranoid about government tracking of his online account so he did not actively post.

Domestic terrorist cells need a combination of opportunity, willing manpower, resources and leadership. It is less about having specific variables and more about the combination of factors and timing.

C. Ideology

The “Atlanta Five” cell is a homegrown, violent extremist Sunni organization that adheres to the ideology espoused by groups like al-Qa’ida. They believe the standard points articulated by al-Qa’ida that Islam faces enemies both from within and without who are seeking to secularize, neutralize, and demilitarize the religion of Islam so that it becomes more amenable to the interests of the Zionist-Crusader conspiracy. They believe that Islamic leaders within the West have either bought into this diluted version of Islam knowingly or they are too far deluded to understand the reality of the world as it is today. They believe that their responsibility is to awaken Islam within the West by taking the fight to the next level, by forcing Muslims to take notice of the fact that they are in a war with Western governments.

Like many homegrown jihadist cells, their level and specificity of knowledge about their ideology is low. The global al-Qa’ida movement has dedicated more time and energy in recent years on trying to mobilize their movement to action than they have tried to increase their overall level of ideological knowledge. In many

⁸²⁴ For a more in-depth look at homegrown radicalization in Europe, see: Tomas Precht, “Homegrown terrorism and Islamist radicalization in Europe,” Danish Ministry of Justice, December 2007. Available at: <http://www.scribd.com/doc/15782572/Home-Grown-Terrorism-and-Islamist-Radical-is-at-Ion-in-Europe-An-Assessment-of-Influencing-Factors->

ways, there has been a systemic reductionism underway, where more focus is placed on rousing, high-gloss imagery and easy-to-follow recipes for action.⁸²⁵

Obtaining a nuclear weapon was not a goal that the cell had initially believed they could accomplish. It does not contradict their understanding of what is religiously legal or strategically useful. With the goal of drawing attention to the cause, particularly for cell leader 1, a nuclear weapon would be the ultimate way of demanding that Muslims take notice and that Western non-Muslims cease their current policies. From the research that cell leader 1 conducted, enough religious justification exists – as articulated by Nasr al-Fahd in his 2003 fatwa authorizing the use of nuclear devices.⁸²⁶ For them, no follow-on discussion is necessary.

The primary goal for the cell leaders was to attract attention to their cause by conducting an operation that was as big as they could muster. If destruction led to media coverage, then that would be ideal. If psychological panic and terror within the society was what garnered the most media attention, then that should be their priority.

The cell leaders' political goals were part and parcel of their ideological goals. They believed that the United States needed to remove all of its economic, cultural, military and social influence from the Middle East and broader Islamic world at once. This included withdrawing American troops from both Afghanistan and Iraq. It included ceasing all drone missions in Yemen and Pakistan. Neither of them believed, however, that this was realistic to hope for in the near future.

A primary goal of al-Qa'ida's terrorism is to force Muslims to choose sides. That can happen just as effectively from inspiring them as it can from eliciting an over-reaction from a public and/or government, which creates a sense of fear and alienation among Muslims. There would be no greater way to elicit that response from the United States than to detonate a nuclear device in this country. Muslims around the world would either realize that violent resistance was possible or suffer at the hand of the backlash that ensued.

D. Constituents

There are three primary groups that this cell is seeking to influence through their terrorist plot. The first and most important are Western Muslims who they believe have either intentionally compromised their beliefs or been deceived into thinking that Islam and the kind of capitalist democracy that is advanced by the United States are compatible. The second constituency is the people and government of the United States and the Western world more broadly. Their goal is to inflict one more savage blow against the West in order to punish them and deter them from continuing their policies vis-à-vis the Islamic world. The third constituency is their immediate supporters from within al-Qa'ida and the Pakistani Taliban – as well as the global al-Qa'ida movement – who they feel that they must not let down. The cell must show that they are another brick in the wall of global Islamic resistance.

These constituencies matter in different ways. First, the cell leaders realize that there would be no recruiting or fundraising to be done for their cell in the aftermath of their attack – because they would either be dead or imprisoned. Instead, they were more focused on the immediate gains of managing the lasting portrayal of their attack and their individual reputations.

Inspired by the emergence of other self-starters, lone wolves and would-be cells in the United States and across the West, this cell believed that they too could be an inspiration for future aspiring terrorists who understand their duty to their religion, the ummah and themselves. From within Islam, the cell would perceive itself, however, to have a microscopic level of support, which they believe is due to the fact that most Muslims, they would argue, are blind to the false reality within which they are living. An important tension has emerged in recent years between the operations of homegrown cells and the need for the core

⁸²⁵ For more, see, Jarret Brachman and Alix Levine, "You Too Can Be Awlaki," Fletcher Forum of World Affairs, Vol.35:1 Winter 2011.

⁸²⁶ Nasir bin Hamd al-Fahd, Nasir, "A Treatise on the Legal Status of Using Weapons of Mass Destruction Against Infidels," May 2003. Available at: <http://www.carnegieendowment.org/static/npp/fatwa.pdf>

al-Qa'ida organizations to maintain their brand-name legitimacy. On the one hand, al-Qa'ida's senior leaders have been reticent to urge homegrown action. They came to understand that the al-Qa'ida brand has been so tarnished by wanton acts of violence against civilian targets that it was in their best strategic interest to tightly control terrorist attacks done in the name of al-Qa'ida. The group's senior leaders issued numerous statements carefully proscribing the kinds of attacks for which they would be willing to claim credit.

On the other hand, there has been a collective push from the grassroots movement, in response to and as a result of, the kinds of propaganda issued by al-Qa'ida in the Arabian Peninsula (AQAP) that demanded individual, lone wolf and small cell attacks in the West.

The cell leaders, likely disappointed with their local Islamic communities, believe that they have no chance of changing anything without a major symbolic moment, one that will force Muslims to awaken from their illusory priorities and recognize that they are in the midst of an existential war. From that perspective, they believe that the primary constituencies of this attack would be:

- Al-Qa'ida's Senior Leadership, who has at least given their permission for the attack, if not outright funding and support;
- Al-Qa'ida in the Arabian Peninsula, who has been the primary ideological motivation for the cell members and helped to provide a vocabulary of individual action for Muslims in the West;
- Al-Qa'ida supporters in the West, who they are hoping to awaken to follow suit and take action, catalyzing a Western revolution;
- Al-Qa'ida supporters around the world, who they hope to inspire with their attack by demonstrating that they have brothers in arms in the United States;
- Mainstream Western Muslims, who they are hoping to convince to rethink their willingness to participate in Western political, economic and social institutions;
- Muslims around the world, who they hope to convince to support al-Qa'ida.

Beyond their immediate core al-Qa'ida constituency, the cell leaders are likely suspicious of Western Muslims because they have been convinced, as per al-Qa'ida's ideology, that this community has not understood its true religious duty and has, therefore, been more of an obstacle to al-Qa'ida's success than an ally. Like other homegrown extremists, they define themselves in stark contrast to mainstream Western forms of Islam, viewing it as diluted and morally bankrupt.

Financial Backing

Like most Western cells, the Atlanta Five is focused more on short-term priorities and interests rather than longevity. They have all likely bought into the belief that each of them will perish or be imprisoned in one way or another after the attack. The leaders have likely debated about whether this attack will aid al-Qa'ida's broader goals, which includes increasing funding to al-Qa'ida. Although they recognize that many Muslims will be repelled by such an extreme act, they have more than likely bought into the argument made by individuals such as Anwar al-Awlaki, Abu Yahya al-Libi and Abu Musab al-Zarqawi that most Muslims do not know what is in their best interest. A nuclear detonation, the cell leaders would likely argue, could conceivably spark the Western revolution al-Qa'ida has been seeking, one result being increasing funding and overall support to al-Qa'ida.

This specific cell would likely have no financial backers other than, potentially, the al-Qa'ida senior leadership. This is more of a question of whether the cell leaders believe that they are operating in sync with the desire of the global support movement from which financial support is given to al-Qa'ida organizations. In other words, would an attack like this strengthen or damage the resolve of the global support movement in such a way that it would translate to more or less resources? In some ways, however, the group is not likely to be operating at that level of concern or sophistication. If they are tasked with detonating a nuclear device by the al-Qa'ida organization, then they would likely believe that those in a position to make those decisions had already conducted the necessary calculations and determined that such an attack was in the best interest of the global movement and Islam writ large.

Once the nuclear weapon is brought into the United States, if acquired from overseas, then any deployment of it would be considered a success. The perceived risks would be in transporting it to the United States. That said, if the bomb went off in transit, particularly within an Islamic country, the cell would probably not feel any sense of profound loss but would be concerned about perception that killing hundreds of thousands of Muslims might have within Islam.

E. Specialists in the Group

The cell has no technical expertise to build such a weapon and therefore must receive it in near detonation-ready form, which makes shipping such a weapon more logistically difficult and increases the likelihood of a failed or mistimed detonation.

F. Existential Challenges to the Group

The cell leadership does not think it likely that their enemies will obtain knowledge of the group's possession of a nuclear weapon. For such an operation, there is only success or failure. Success includes successful detonation at the appropriate time in the appropriate place, a misfired detonation or even failed detonation. Failure would be having the device be apprehended on its way into the United States. Other than that, once the device reaches even proximity of the United States, they have found success, a point of view solidified in the aftermath of two failed attacks: the Christmas Day bombing attempt by Umar Farouq Abdulmutallab and the Times Square bombing attempt by Faisal Shahzad. Despite the attacks failing, the perpetrators' ability to situate explosive devices where they did became understood within the global al-Qa'ida discourse as a success. The Atlanta Five cell would proceed as if the enemy did not have knowledge of their pre-employment possession.

In short, the attack is meant to pressure the United States to either change its policies or take counterproductive steps that al-Qa'ida can exploit. The cell leadership would most likely expect an extreme response, either the immediate U.S. withdrawal from the Middle East or to redouble its commitments in that region and also begin applying hostile policies to Muslims within the U.S. Public pressure and economic limitations would suggest that redoubling commitments in the Middle East as an unlikely outcome. The leadership would view any increased discrimination against Muslims in the U.S. as serving to alienate and radicalize Muslims in the West.

Given the unparalleled nature of such an attack, the cell leadership would assume that the United States response would be irrational and emotionally-driven, one that was designed to show a paralyzed and panicked populace that the U.S. had not been incapacitated. They would hope that the show of force would be so aggressive and unrestrained against Muslims that the U.S. would provide the al-Qa'ida global movement with a wide array of propaganda opportunities.

The cell leadership understands that they are amateurs who have had little to no training. Their operational security skills are weak at best, and they have no technical knowledge about the weapon that they are tasked with detonating. The most obvious weakness is the human factor, that a member of the cell will be captured and confess, or make a mistake that will compromise the operation. The cell leaders are therefore likely to maintain very strict operational control over their members as the operation moves into its latter stages.

II. Factor Analysis

A. The Leadership's Tolerance for Uncertainty

1. Arguments for High Tolerance:

- Comparatively lower OPSEC (cell communication, tradecraft)
- Less concern about timing, location, targets of an attack
- Willing to let cell function in the open prior to the attack

Their movement has fought for decades with little to no tangible advancements for the quality of life for Muslims around the world. Rather, quite the opposite has materialized. The Western war against Islam has only grown more militaristic and gained more fronts. American military forces continue to occupy Islamic countries. American government agencies openly hire anti-Islamic counterterrorism trainers and implement policies that are designed to presume the guilt of Muslims first. The United States and Western countries are interfering with Arab governments.

The extreme level of violence that this cell is willing to take is a measure of last resort that has been necessitated, in their perspective, by the U.S. government's actions and the support from their populace toward that end.

The overarching goal is to elicit fear from the West while inspiring hope among their core Islamic following. Tactically, the goal is to get a nuclear device into the United States and to detonate a bomb. Where, when and how this happens is less important (tactically) than the strategic fallout – and consequent terror – from the attack. With a high tolerance for uncertainty, the leadership should be prepared to detonate the bomb at whatever point is possible – not necessarily ideal.

As amateur terrorists, and given the spectacular level of attack that this would be, the cell leaders would be unlikely to make decisions according a rational calculus. Maximizing efficiency in target selection is far less important than simply conducting the attack. With a high degree of tolerance for uncertainty, predicting fall-out, timelines, targets, lethality, etc., are not of chief concern. Those calculations would take a back-seat to the first priority: obtaining and detonating the device.

2. Arguments for Medium Tolerance:

- Moderate concern for cell OPSEC
- Greater interest in keeping the cell isolated before the attack
- Increased hands-on control over timing, location, targeting, etc., of attack
- Greater interest in maintaining communication with command-control.
- Lower willingness to detonate unless minimum conditions are met.

A medium tolerance for risk would suggest that the cell leaders have a strong ideological commitment and are likely caught between the pragmatism of detonating a nuclear device and their ideological restrictions about how, against whom and when mass destruction of life and property can be committed, particularly in the case where the identities of the victims cannot be known in advance. This is where the work of Abu Muhammad al-Maqqisi would be relevant – taking esoteric parallel examples from history (night raids, catapults) and bringing them into relevance for today.⁸²⁷

Disentangling ideology and religion in this case is harder but the likelihood is that the cell leaders would be wrestling with religious restrictions on mass killing of people. They would be looking to Quran and Hadith examples, like those brought forward by ideologues like al-Maqqisi or al-Fahd, for guidance. They would likely conclude that, given the low number of Muslims likely to be killed in a Western country, such an attack would be sanctioned and any losses of Muslim life would be covered by existing fatwas on adversaries taking Muslim shields.⁸²⁸

If the political goals matter more than the goal of simply detonating the device, that suggests that the cell leaders will be more reticent to detonate unless their political goals are more likely to be actualized. More

⁸²⁷ For more on Abu Muhammad al-Maqqisi, see: Joas Wagemaker, "Abu Muhammad al-Maqqisi: A Counterterrorism Asset?" Combating Terrorism Center's CTC Sentinel, May 15, 2008. Available at: <http://www.ctc.usma.edu/posts/abu-muhammad-al-maqqisi-a-counter-terrorism-asset>

⁸²⁸ For more information about al-Qaida's thinking on killing Muslims who are being used as human shields by adversary military forces, see: Jarret Brachman and Abdullah Warius. "Abu Yahya al-Libi's "Human Shields in Modern Jihad," Combating Terrorism Center's CTC Sentinel, May 15, 2008. Available: <http://www.ctc.usma.edu/posts/abu-yahya-al-libi%E2%80%99s-%E2%80%99Human-shields-in-modern-jihad%E2%80%9D>

than likely, a homegrown American cell such as this would be less concerned with long-range, strategic objectives and more with striking a blow at what they believe to be the head of the snake: the United States Government.

With only a medium tolerance for uncertainty, the cell leaders are more likely try to balance between the risks they must take to ensure that they give their weapon as good of a chance for detonating with their desire to accept a less than optimal outcome in order to keep risk of total failure to a minimum. In that case, the leadership would be ambivalent about the need to take big risks in order to commit destruction versus taking small risks but getting a media bounce from the news that an al-Qaida affiliated cell had acquired and sought to deploy a nuclear device in the United States. The outcome of this ambivalence would likely come down to specific leader psychology and/or context.

The cell leaders are likely to be increasingly concerned with the degree to which the cell is able to control OPSEC. Cell members are probably going to have less trust from their leaders, and their movement prior to the attack is likely to be more restricted. Communications within the cell are likely to be limited and roles/timelines/plans are all likely to be far more defined than when compared to cell leaders with a higher willingness for tolerating uncertainty. Importantly, this suggests that subtle deviations from expected outcomes are more likely to result in postponement of the attack.

Rational decision-making is more likely in this scenario, suggesting that the cell leaders will have mapped out expected pathways for the lead-up to the attack. They are likely to have implemented stronger command-control mechanisms.

3. Arguments for Low Tolerance:

- Nearly every homegrown plot and cell in the United States has either failed or been compromised. This is due to the fact that these cells made careless errors, did not take operational security seriously enough or trusted individuals who were working with or even for law enforcement.
- The chance for a cell to successfully detonate a nuclear device in the continental United States is extremely rare. They have a chance to not only do something that few thought was possible, but to go down in history with the greatest members of al-Qa'ida, such as the members of the 9/11 attack. Failure would be squandering a historically momentous opportunity for their movement and the achievement of their objectives.

If the cell leaders demonstrate a low tolerance for uncertainty, then ideological injunctions regarding targeting will play a large role in decision-making. They will likely seek to abide, to the letter, to the prescriptions and proscriptions of al-Qa'ida's leadership. This includes their stated policies on mass casualty attacks, individual operations and operations in the West.

From the cell's perspective, religiously, Shariah dictates regarding the limitations on mass killing of individuals whose identity cannot be accurately predicted prior to the attack would have to be dealt with before such an attack could be conducted. A low tolerance for uncertainty, if religiously motivated, would suggest that the leaders have placed a high level of control over the timing/location of the attack in order to comply with the existing religious protocols for waging such an attack.

If political goals are the driving force behind the low degree of tolerance for risk and uncertainty, then it would be likely that the cell is most concerned with ensuring clarity of message. This means that they have likely gone to great lengths to ensure that claims of responsibility are timed and that the execution of the attack perfectly syncs with the stated grievances, target audiences and political goals articulated by the cell.

With a low appetite for risk, it is highly likely that the cell leaders have ensured that their tactics are as closely in line with their strategic goals as possible. Terror/destruction might be the goal but it would have to be highly controlled in terms of who was feeling terror, where, for how long, etc. A low threshold for risk suggests that they have very carefully thought about the desired outcome from this attack.

Cell Leader 1, who is already concerned with operational security and compromise, would likely try to minimize the group's linkages to other constituencies. This would include both constituencies with whom the cell members are previously linked to, such as family, friends and social clubs, but also those groups who may even support them, including Islamist activist groups or like-minded jihadist groups in other places. Restricting linkages in an era of extremely high security scrutiny is the best approach for a cell that has a low tolerance for uncertainty and risk.

In the eyes of the cell leaders, OPSEC is vital. Isolation of group members leading up the attack would be Cell Leader 1's preference if it were possible, but it would be difficult to enact given the ad hoc nature of the group. More than likely, as the attack grows closer, Cell Leader 1 is going to grow increasingly stressed and micromanaging, concerned with the reliability and security within the group. There is a chance that the stress placed on the members by Cell Leader 1 could cause at least one of them to potentially make an error or rethink his participation in the attack. The more hesitation that the cell leaders view in their members, the increased their perception of security risk is likely to be. The cell leaders would be highly rational in their execution albeit likely governed by religious precepts. In other words, their rationality may be centered on finding ways to comply with limitations leveled against them by their own religion. There is a strong likelihood that, as the attack gets closer, their actions are going to be less rational and systematic. Given that these are not hardened, extensively trained and battle-tested leaders, the stress of enacting what could be the single most devastating terrorist attack in history could lead the cell leaders to crack.

4. Final Estimation:

Medium is probably the most likely. Cell leaders who exhibit a low degree of uncertainty would probably not embark on this kind of mission. And cell leaders with too high a tolerance for uncertainty would probably not be entrusted / tasked for this kind of mission.

5. Factor Weight:

The cell's tolerance for uncertainty is a critical factor in the case of an amateur, homegrown cell trying to execute a historically momentous attack. The cell leaders are likely to place overwhelming pressure on themselves. If they are in contact with an overseas handler, they are likely to face increasing pressure from him as well. That pressure would translate into taking an increasingly hard line with the cell members who are likely less committed to the success of this operation and less prepared for the consequences.

6. How this factor might change in the next five years.

Changes in the structure of the larger al-Qa'ida movement over the next five years are likely to reduce tolerance for uncertainty. If fragmentation and weakening of core al-Qa'ida components continues, overseas handlers will likely exert diminished levels of command and control of homegrown cells. As a result, cell leadership would have to take on additional decision-making functions, rather than merely implementing decisions made elsewhere. This suggests that amateur cells trying to execute highly complex and technical attacks such as this will face only greater difficulty.

B. The Leadership's Definition of "Success"

1. Arguments for Success Entailing a Specific Outcome:

- For a homegrown amateur cell, the threshold of what constitutes success is far lower than that of an official al-Qa'ida operation.
- In order to define the operation as a success, the killing of even one individual or the damage of some infrastructure would be a success.
- In fact, even the failure to kill anyone could be still defined a success if the cell had been at all successful in acquiring a nuclear device without being detected by law enforcement.
- The only way that this threshold is raised is if it becomes known that the cell was operating with some support from an overseas point of contact who is officially a member of the al-Qa'ida senior leadership or a regional affiliate.

With such low standards, the overwhelming goal would be to create terror and fear. Certainly a failed detonation would be seen as a squandered opportunity for al-Qa'ida's global movement but it would not cause the entire operation to be cast as a failure in the same way that other attacks involving explosives that failed to detonate have still forced the U.S. Government to defend their inability to detect the acquisition and deployment of that device earlier in the process.

If success is framed by lethality or execution, then the emphasis on tactics will be higher. If, on the contrary, success is framed by the aftermath, including political change or media coverage, then the strategy will matter more – ensuring that the right target is attacked in the right place at the right time. Given the fact that this is an amateur cell, there is a low likelihood that they have considered a sophisticated plot in mind for exacting political compromises out of the United States.

In many ways, because these are not hardened fighters but rather amateur, do-it-yourself terrorists, the single biggest unknown is their commitment to this mission. Are they willing to die? Are they willing to spend the rest of their lives in prison? Are they willing to place the success of the operation over fears that they have about potential backlash against their family members? Are they willing to continue to detonation if the religious validity of their attack is placed in question by a religious authority whom they respect? These are the most pressing variables regarding a homegrown terrorist cell.

2. Arguments for Success Allowing for a Suboptimal Outcome in Target and/or Timing:

- Detonating the device at all is better than not detonating it
- The killing of some Americans is better than the killing of no Americans
- The destruction of some infrastructure is better than the destruction of none
- At least the detonation, even if done in a suboptimal way, demonstrates that it is possible to conduct such an attack. This sets an important precedent for future aspiring cells.

Given that the cell would likely be prioritizing terror over specific kill counts or infrastructure damage, then a sub-optimal outcome in either targeting or timing would still be considered a success. It would still accomplish the goal of demonstrating that it was possible to obtain and deploy a nuclear device into the United States. It would demonstrate that the al-Qa'ida ideology was still holding sway over individuals in the United States. It would likely create some level of inspiration for others who debated whether or not they would be able to make an impact through a homegrown attack. It would force the U.S. Government to defend their lack of ability to detect the device prior to detonation and would likely lead to a massive increase in spending on the federal, state and local government levels. It would increase the security fears in the U.S. and make threats, even if unfounded, in the future hold more sway – forcing the U.S. Government to take threats more seriously, which means giving al-Qa'ida more leverage generally.

If the leadership is primarily concerned with death and destruction, then a suboptimal detonation would be acceptable and still fall under the rubric of success, so long as it went off in a location where it could kill people or damage infrastructure. That said, if political goals are first and foremost, then a suboptimal detonation could prove disastrous in that a specific target in a particular location would be crucial to ensuring that the attack yielded the kind of follow-on response. If the attack occurred in the wrong place or was not timed in the right way, the message could be lost or it could provoke the wrong kind of response.

3. Arguments for Success Allowing for a Suboptimal Outcome Resulting in a "Fizzle" Yield:

The fact that this is a homegrown violent extremist group immediately lowers expectations. Given the appalling track record of these kinds of self-starters in the United States – being infiltrated by the FBI, being interrupted mid-planning process or getting to the point of execution but being unable to make the explosive actually detonate - the mere acquisition and attempted detonation, even if just a fizzle yield, of this device would be a success.

The English-language online jihadist community has already decided among themselves that failure is still success so long as one's intentions are in accordance with the movement. In this case, there is virtually no one from within that constituency who would view this kind of result as a failure given the amount of

conversation that has occurred on the issue.

Media headlines would still be dominated with news about this story. Deriving attention from their attempt would still be viewed favorably within the al-Qa'ida community.

The United States Government would be forced to address how and from whom a domestically originated cell was able to acquire, build and deploy a radiological device. Despite the fact that this was a fizzle yield, there would be demand within the public for someone to take accountability. There would also be a likely huge uptick in funding on related technology and equipment nationwide. This increase in counterterrorism funding would be spun as success by al-Qa'ida's community.

Al-Qa'ida's ideology is so adaptable that it allows them to take virtually any situation and morph it into a positive for their movement. The Senior Leadership has not defined whether instilling terror among al-Qa'ida's adversaries is the priority or destroying their infrastructure. That means that al-Qa'ida's supporters can cast virtually any result as being successful because the left and right limits are so broad. In the case of an amateur cell like this one, simply accomplishing anything that elevates them to celebrity status within the al-Qa'ida historical pantheon would be sufficient. In an ideal world, they would fully detonate their device but, knowing that God wills whatever outcome occurs, the cell would be perfectly satisfied with accomplishing anything that al-Qa'ida would see as advancing the collective goals.

The political goals are fairly straightforward – any detonation, even a fizzle yield – will prove to be an embarrassment for whatever administration is in office. They will be held accountable both by the opposition party and the American people to one degree or another. That in itself would be viewed as al-Qa'ida having the ability to influence the American voter (as seen after the 2004 Madrid bombings, when al-Qa'ida argued it caused the Spanish electorate to vote out the sitting regime). Beyond that, unless the group were to both claim responsibility and threaten further detonations unless the United States Government makes specific policy decisions, there is little more politically that could come from this kind of attack.

4. Final Estimation:

A specific outcome would be ideal. It would inflict the most damage, maximize the most damage and lethality, gain the most notoriety and cement that cell's reputation within the al-Qa'ida mythology. That said, the group would be satisfied with simply acquiring and deploying the device, which they would likely see as still instilling fear within the U.S. Government, elevating them to celebrity status within the al-Qa'ida global movement, inspiring other like-minded individuals and, with hope, making al-Qa'ida's long-term strategic objectives more attainable. Final estimate is suboptimal outcome even with a fizzle.

5. How this factor might change in the next five years.

Homegrown cells have typically been short-lived. Therefore, it is more useful to imagine how the operating environment might change for a future homegrown cell over the next five years. The odds are very strong that al-Qa'ida's ideology will dissipate over time. With the decrease in quality of the most significant propaganda device for English-speakers in the Inspire Magazine, a decreasingly visible senior leadership to direct and inspire their global followers, and a consistently low number of homegrown extremist cells and individuals who pull off a successful attack in this country, there is not likely to be a growth in cells of this nature.

That may either place more pressure on them to do something spectacular or rather lower the barrier to entry so that any attack is seen as a good one. In that case, there is a very low likelihood that the cell would go through the time, energy, cost and risk of trying to obtain a nuclear device unless there was an individual within that cell whose self-confidence and radical commitment knew no bounds. This kind of attack is truly one that only the most daring and confident would seek to pull off.

C. The Importance to the Leadership of Flexibility in the Field

1. Arguments for High Importance:

Because this is a small cell, they would likely have a high degree of trust for one another. They would have likely discussed a host of contingent scenarios and, therefore, the leadership would feel comfortable with their cell improvising – so long as they believed that each member was competent.

2. Arguments for Medium Importance:

Leaders would prefer moderate levels of flexibility if they were uncertain about the competency or decision-making of the other members. If they believed that there was a chance for them to do something that might compromise the entire operation, they would probably try to structure those choices or add in redundancies so that they limited the number of decisions their lesser members had to make.

3. Arguments for Low Importance:

For a controlling, micromanaging leader, one who has sunk a massive amount of time, energy and resources into getting to the point of operationalizing this plot, there is probably very little chance that he would take anything for granted, particularly the decision-making of his cell.

4. Final Estimation:

The odds are that Cell Leader 1 would have a low tolerance for flexibility in the field. The leader is likely to be an ego-driven micromanager who has a precise, clear and calculated understanding of how the operation is to go. Any changes to that plan on the fly would likely have to be either gamed out prior to or only occur with his express approval during the course of the operation. Final estimate is low importance for flexibility in the field.

5. How this factor might change in the next five years.

Given the short-lived nature of jihadi homegrown cells in the U.S., it is more feasible to focus on how changes in the operational environment would impact homegrown cells in general, as opposed to the Atlanta Five, specifically. If attempted homegrown operations decrease in the U.S. over the next five years, it would be truly exceptional for one to emerge at this level of sophistication, an outcome possible only likely under the leadership of a particularly security-conscious leader. Such a leader would be unlikely to place great importance on high levels of operational flexibility.

D. The Leadership's Perception(s) of Previous Command and Control Outcomes

1. Previous Experience With Predetermined Command and Control:

There is just a lack of useful models for the leadership to draw upon in this context of similarly styled homegrown extremist cells conducting an operation of this magnitude or logistical sophistication. In some ways, this frees the cell leadership from the past and allows them to think more innovatively and flexibly about what would work best for them given their particular cell's strengths, capabilities and idiosyncrasies.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Failure:

These are difficult to say from the perspective of a homegrown jihadist cell. They would likely be using similarly styled homegrown individuals and cells as their model from which to judge. Given that baseline, there are few cells in the United States who have been able to get to the point of going operational, so virtually all of them have been failures.

The cell leaders would likely be very familiar with the attacks of the Madrid attacks on March 11, 2004 and the London attacks on July 7, 2005. These attacks are likely the most important examples that such an attack is even possible for a homegrown cell to conduct.⁸²⁹

Cell leadership would likely see in the examples of former groups and individuals in the United States an

⁸²⁹ For more about homegrown radicalization in the United States and United Kingdom, see: Daveed Gartenstein-Ross and Laura Grossman, "Homegrown Terrorists in the U.S. and U.K. – An Empirical Examination of the Radicalization Process," Foundation for Defense of Democracies, April 2009. Available at: http://www.defenddemocracy.org/stuff/uploads/documents/HomegrownTerrorists_USandUK.pdf

inability to take proper security measures, resulting in their being compromised by law enforcement. Consider, for example, the arrest of Zachary Chesser, the young man from Northern Virginia apprehended on his way to join al-Shabaab in Somalia. A review of Chesser's pre-arrest activity shows him to be extraordinarily public in his support for al-Qaida and his hatred for American culture.⁸³⁰ Those kinds of public statements drastically increased the level of uncertainty for Chesser's ability to travel overseas or to communicate with others without being subject to surveillance by law enforcement. In other words, because of Chesser's highly public activities, he dramatically increased his risk profile and the level of uncertainty about whether or not he would be able to accomplish his mission, which was to travel overseas.

The lack of useful role models on this front limits the ability for the group's leadership to develop an informed opinion. For that reason, they are more likely to rely on their own perceptions and opinions, which could depend as much on individual personality characteristics as any study of historical precedent.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Failure:

Looking at other cells, the 7/7 group had a very pre-determined set of moves that would likely be a good model for them. So did the 3/11 Madrid bombers.⁸³¹ These groups were known for being methodical in their planning and rehearsing. As far as the London bombers go, they did very little to disturb the perception of the status quo through major behavioral changes or other activities. It was in this predefined model for acting – not just during the group's attempt to execute the attack but throughout the group's life cycle – that they would see predefined roles, responsibilities and functions to be a better model than the alternative.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in an Indeterminate Outcome:

None.

2. Previous Experience with Assertive Command and Control:

Arguments for Leadership Perceptions that Assertive C&C Resulted in Failure:

None.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Success:

The best example of an assertive styled attack would be the 9/11 attacks, wherein some of the members did not seem to know the specific nature of the attack or the target. These 'muscle' men were tasked with a very specific role and responsibility and were informed of the actual mission at some point after the operation had begun.

The success of the Mumbai attacks might also serve to be a useful model, wherein handlers were able to selectively engage and direct their operatives from afar throughout the course of the operation. This assertive style ensured that the men on the ground were able to make more informed operational decisions without having to worry about monitoring news broadcasts. This actually maximized their effectiveness because they had expanded their 'eyes and ears' without having to take focus away from the primary goal: killing and spreading mayhem.

A risk-averse leadership might look at an assertive model as a way of minimizing the number of people within the cell that know the complete mission, thereby further mitigating the likelihood that the operation would be compromised. It would also give them a further ability to control the operation throughout execution without having to be there directly.

Arguments for Leadership Perceptions that Assertive C&C Resulted in an Indeterminate Outcome:

⁸³⁰ For more on the case of Zachary Chesser, see: "Zachary Chesser Timeline," The Washington Post, October 27, 2010. Available at: <http://www.washingtonpost.com/wp-srv/special/metro/zac-chesser/>; and Tara Bahrapour, "Terror suspect took his desire to belong to the extreme," The Washington Post, July 25, 2010. Available at: <http://www.washingtonpost.com/wp-dyn/content/article/2010/07/24/AR2010072402497.html>

⁸³¹ For more on the Madrid cell, see: Fernando Reinares, "The Madrid Bombings and Global Jihadism," Survival, Vol. 52, No. 2, April–May 2010, pp. 83–104.

The lack of knowledge about specifics of previous instances would be the single most likely reason that the leadership would hold this position.

With a leadership that is concerned about mitigating risk and uncertainty, the assertive model does give them more perceived control of an operation during its execution by forcing the operatives to consult them on any changes or at certain predefined times/phases.

3. Previous Experience with Delegative Command and Control:

Arguments for Leadership Perceptions that Delegative C&C Resulted in Failure:

The most obvious examples of delegative command that allowed the operatives to improvise that resulted in failure are the Amman hotel bombings, wherein one operative chose to detonate his bomb in the middle of a wedding in the ballroom instead of in the lobby, and the 7/7 bombings, wherein one bomber targeted a bus once his device failed to detonate on the train.

The likelihood of the cell leadership knowing the command and control and other highly specific operational details of these examples, however, is fairly low; they would probably not be used as a model for the problem with delegative styled authority.

Arguments for Leadership Perceptions that Delegative C&C Resulted in an Indeterminate Outcome:

Generally speaking, empowering individual operatives who have been well-trained and have a clear understanding of the strategic and ideological bigger picture seems like an effective approach. But it is all the extenuating circumstances that impacts whether leaders see the delegative model as potentially useful or problematic. From the perspective of the leadership profile being used for this case-study, there is little perceived good that could come from an operative deviating from the plan at-hand. If it was devised by the cell leadership and approved by the cell, then there is nothing that should be modified other than minor tactical issues that may arise. So, in that sense, there are very few reasons that the leader would view this approach as preferable to an assertive model.

4. Leadership Perception of Outcomes Based on Command and Control Arrangement Type

Predetermined Final Estimation:

This approach is less about past experience and more about personality issues, including control, ego and paranoia. Pre-determined would be ideal if possible. But it misses the recognition that nothing ever goes exactly as it has been planned so that unless the cell has gamed every possible contingency, the operative will have to make decisions in the course of the operation. The final estimate is indeterminate.

Assertive Final Estimation:

In the situation described above, where executing the attack requires adjustments in the midst of an operation, a controlling leader would want to maximize input into decisions leading up to the detonation of the device. In that sense, the assertive model allows for him to intercede in decisions that must be made, or limit the amount of information that a given operative knows about a plot in order to compartmentalize it. This would probably be a preferred situation that a HVE leader would likely see as having the best chance of success in the case that pre-determined was not viable. Final estimate is success.

Delegative Final Estimation:

Delegative is the worst model for a high-control leadership that is likely consumed with paranoia and the pressure of wanting to make a complex attack work. Final estimate is failure.

E. The Leadership's Perception: Complexity of Getting a Working Weapon to the Target (US)

1. Arguments for Perception of High Complexity:

- Depending on the state of the weapon upon embarking on the delivery phase (whether it is activated or needs to be done so at the time of delivery), the leadership might see a different level of complexity.
- If the device needs to be armed at the location of detonation, the logistics are more complex in that

a technical expert would need to accompany delivery. It would also entail more time at the location than a simple drop-off would.

The more people that are involved, the more risky and uncertain the outcome becomes. Involving a highly-trained technical expert who unlikely to be operationally qualified increases the level of risk for the operation.

Success at the most optimal level would be successfully transporting the device to a location that was believed to be impenetrable (such as downtown Manhattan) or the Capitol region of Washington D.C. This, however, would mean moving a device through multiple levels of sensing technology aimed at picking up radioactive traces. If the device needs to be armed on site, that would mean bringing a non-operative qualified technical expert or trying to train a field operative, which could lead to a failed detonation or fizzle. If the team could get the weapon in place, even if they were unable to detonate it successfully, they would more than likely refer to it as a success in that it would highlight security vulnerabilities of the targeted location.

2. Arguments for Perception of Medium Complexity:

If the device is armed and activated at the source of pick-up, then the logistics are far more streamlined as field operatives who have been trained to detonate the device – or if the device is on a timer/remote detonator – then their only function would be to smuggle the device into a target area. While still difficult, depending on the location of the target, it reduces some of the complexity concerns.

3. Arguments for Perception of Low Complexity:

The only way that this would be the case would be if they were detonating a weapon that was already in position, which would reduce the complexity of transporting it, or in some other kind of extenuating circumstance where the moving and detonation of the weapon entailed very low levels of risk and planning. Otherwise, moving a nuclear device in the United States is going to involve some degree of complexity greater than “low.”

4. Final Estimation

High, depending if the target is in a densely populated, and therefore highly secured, urban area, or Medium if simply detonating it whenever they have the device armed and ready. Final estimate is high.

5. How this factor might change in the next five years.

In terms of whether things will change significantly over the next five years for similarly styled groups, it really depends on whether there is a successful, major homegrown plot that is able to kill a significant number of people or results in a significant amount of damage to infrastructure. If this is the case, there is likely to be greater public pressure on local, state and federal government agencies to commit more time, attention and resources to homeland security. If there is not a significant attack, increased public lethargy and unwillingness to dedicate considerable resources to securing the homeland are likely. In that case, the logistics for moving a nuclear device around the United States will be easier – albeit not necessarily easy.

F. Leadership's Perception of the Trustworthiness of Relevant Group Members

1. Arguments for Perception of High Trustworthiness:

- The leadership has hand-selected each member.
- Enough people have been arrested in the US on terrorist-related charges to dissuade those who are only passively interested from engaging in this kind of plotting.

With an extremely low tolerance for uncertainty, the leadership will select individuals with whom he has a long-standing personal relationship – drawing on kinship/family networks, most likely from within the same ethno-national background.

Technical skills and operational savvy would be less important to the leadership than trustworthiness. Given that he would likely compartmentalize the cell and the details of the plot, he would select and train individual

members specifically for their functions to the plot.

Virtually every attempt by homegrown extremists to organize and execute a plot has been thwarted through FBI penetration of the cell. The cell leadership would likely view this backdrop of failure as a warning that ensuring operational security within the cell and among its members is the most important element to making this cell different from previous efforts.

2. Arguments for Perception of Medium Trustworthiness:

On the one hand, the leadership will have to ensure unquestioning loyalty and trustworthiness from his cell members in order to be successful. On the other hand, the reality of working with a team is that people make mistakes: an inadvertent slip of the tongue or mistake by a member could lead to compromising the entire operation. From that perspective, the leader would likely seek to limit and monitor the movement and interactions of the cell members prior to the plot's execution.

This desire to control every aspect of the cell members' activity in order to mitigate the risk of accidental compromising of the cell is offset by the reality of capabilities and the willingness of cell members to completely submit themselves to the cell leadership.

From the leadership's perspective, a huge part of success means not getting caught before they have the opportunity to conduct their attack. With that in mind, they are likely willing to go to any lengths in order to ensure that their cell is not compromised.

3. Arguments for Perception of Low Trustworthiness:

There really is no way that the cell leadership would embark on this kind of plot without having at least a moderate trust in its membership. Otherwise, the risk of being compromised is too high to make such an endeavor worthwhile.

4. Final Estimation:

High trustworthiness.

G. The Leadership's Perception of the Reliability and Security of Communications

1. Arguments for Perception of High Reliability and Security:

The only way the leadership would feel a high reliability of security in communications is if they implement a strict communications plan that relies on a continuous use of burn phones or sim cards. Face-to-face meetings would have to be conducted in a place that they were sure did not contain surveillance equipment from law enforcement or their discussions could be intercepted. Use of email would be likely kept to a bare minimum. Coded communication would be a must. Discussion of operational details would have to be limited to in-person meetings as much as possible.

2. Arguments for Perception of Medium Reliability and Security:

The US government has not been hit at home since 9/11. Therefore, their guard is down. As long as they are not penetrated, there is little reason to think that they will be compromised.

It was only due to the incompetence of Faisal Shahzad that he was unable to detonate his truck in Times Square. The plot was neither identified nor thwarted. Similarly, if the cell leader could put together a plot without being penetrated by the FBI, then there is a strong likelihood that he could execute it.

3. Arguments for Perception of Low Reliability and Security:

Since 9/11, the FBI and DHS have improved at tracking homegrown cells. The likelihood of acquiring, deploying and detonating a nuclear device in the US is, therefore, low.

Cell members cannot be watched 24/7. It is hard to draw on local talent for highly skilled and complex operations. There is a strong chance that one of them will make a mistake that will compromise the attack.

Low reliability of communications channels is more important in the planning period than during the plot's execution. Unless he manages his cell constantly, there is a chance that they could be compromised.

4. Final Estimation:

The leadership is probably torn. His narcissism is likely telling him that he can pull this off. His anxiety is probably telling him that he is about to be compromised at any second. In that case, there is probably both a high and low level of perception of reliability and security working at the same time. Therefore, the effective perception is probably somewhere in the middle. Final estimate is medium.

5. How this factor might change in the next five years.

With the decimation of al-Qa'ida's core group, there is a high likelihood that there will be greater pressure on individuals to take it upon themselves to execute whatever attack they can. In that case, there will be two competing pressures: 1) just to do something; 2) equal al-Qa'ida's senior leadership in spectacle. It really depends on the interplay between the security environment on the one hand and the psychology of the cell leader on the other.

H. The Leadership's Perception of Group Competency

1. Arguments for Perception of High Competency:

The cell leader, who is a narcissist, has hand-selected and trained each individual. In that case, they are a representation of him and, therefore, cannot be seen as anything other than competent.

2. Arguments for Perception of Medium Competency:

Despite being hand-selected by him, they have not been put through a formal militant camp and, therefore, have not been challenged in a way to know how they would respond under pressure – particularly in interrogation settings.

Training about things like OPSEC and counter-interrogation would probably be a greater source of concern for the cell leader than technical expertise, something he would have recruited for at the outset.

3. Arguments for Perception of Low Competency:

Because the cell members have not been to militant training camps or fought on the front lines, they cannot possibly know what it is like to be an actual mujahidin. They, therefore, cannot be trusted and need to be monitored.

4. Final Estimation:

The leader will probably view his cell with increasing skepticism and anxiety as the date of an operation grows closer. He will likely question their loyalty and ability to execute an attack, thinking to himself how far they are from the hardened mujahidin fighters he may have encountered previously in Afghanistan. Final estimate is medium.

5. How this factor might change in the next five years.

The leader's perceived competency of the group will likely fluctuate over time depending on the leader's psychology. The odds are that, as the al-Qa'ida senior leadership grows less relevant, one of two things might happen. First, the regional affiliate(s) may grow in strength. Therefore, a narcissist cell leader would likely begin to view them as a peer competitor. On the other hand, the cell leader may begin to view the vacuum left by al Qaida's senior leaders as a space that he and his cell can fill. Therefore, excitement might begin to trump anxiety about competence.

I. Leadership's Perception of Existential Threat(s) to the Group

1. Arguments for Perception of High Existential Threat:

Homegrown cells are almost always penetrated and/or compromised. Therefore, the odds are not in their favor that they will be able to bring their attack to fruition. The leadership would understand this but be torn

between their own grand sense of self and their paranoid concerns about being compromised. The outcome could be that they believe that, with the decrease in military operations overseas and reliance on technology-led intelligence gathering, that the US government would focus more of their efforts on domestic level threats.

The al-Qa'ida ideology itself is premised on the belief that there is a war on Islam. They believe that the Islamic community itself has been infiltrated and that there are numerous witting and unwitting accomplices working for the government as spies or informants.

This really depends on the level of paranoia within the cell. If the leader believes that the US government has access to intelligence and information using tools and individuals with which they are not familiar, then they might believe that the clock is rapidly ticking. If the leader's own grandiose sense of self dictates, then there will be a greater belief in the cell's level of OPSEC and ability to keep this kind of information away from the enemy.

The leadership would understand that the detonation or attempted detonation of a nuclear device would result in the destruction of the cell. Members who were not killed in the actual attack would likely be hunted down by the government and neutralized.

2. Arguments for Perception of Medium Existential Threat:

The leadership will most likely believe that the government is still focused on international missions and have not been able to prioritize the level of resources, particularly given the financial issues facing the US government, to increasing the level of domestic security. On the other hand, they will also take note that most of the homegrown cells have been compromised over the past decade. So, medium might address the mixed outlook that they have about the existential prospects of their success.

There will be no viable targets to retaliate from the leadership's perspective short of the immediate family and friend's network of the cell members. If they are a hardcore believer, which they likely would need to be, that would not be a concern for them.

3. Arguments for Perception of Low Existential Threat:

There is really no way that the group would believe that there was not an existential threat to them in this security environment unless the leader was of such a narcissistic state of mind that he believed he could overcome all obstacles.

The ideology is predisposed to paranoia and concerns about being under attack. A belief that a homegrown terrorist cell operating in the US is not under existential threat at all times would either be a result of delusion, ignorance or dogmatic belief in the inevitability of their mission.

4. Final Estimation:

The leadership would almost certainly believe that their cell operates at a high degree of existential threat. Anything less would simply not be prudent from a command perspective nor would the cell last very long without that frame of mind. The high concern will likely influence the leadership to press on their cell to work quickly in deploying the device upon its acquisition.

5. How this factor might change in the next five years.

There is no reason that a group would not have an have existential concern for their viability unless the US government massively scaled back its domestic counterterrorism efforts.

J. Leadership's Preference for "Failure"

1. Arguments for Preference for Fail Deadly:

A homegrown cell is probably more apt to accept a fail deadly outcome. If they are willing to detonate the bomb somewhere in the United States, they are probably tolerant of the device detonating anywhere so long

as it does.

In order to make the decision that detonating a nuclear device at all is religiously acceptable, the leadership's ideology would be at the furthest end of the spectrum. This suggests that killing and/or the symbolic fallout from the attack would be of the most concern, not necessarily executing the plot perfectly.

There would be pressure by financiers to execute the attack. A detonation would likely trump getting it exactly right in their eyes.

2. Arguments for Preference for Fail Impotent:

There are few. Perhaps the leadership would be able to accomplish their goal of symbolically creating fear and forcing the US to pour billions more into homeland security than it otherwise would have without actually killing anyone or running into potential religious issues.

If the leadership has any concern for the religious acceptability of this kind of attack, then it is possible that they would prefer to maximize the symbolic nature of the plot while minimizing the actual destructive impact. This would keep them right with God but still make the point.

There is no risk of alienating fence-sitters or others within Islam who would view the mass lethality as far beyond the pale and therefore be turned off altogether.

There could be pressure on the leadership to get it right or don't do it at all to avoid potential backlash or unexpected lethality.

A state sponsor would probably prefer the bomb to detonate, to avoid having materials linked back to it.

3. Final Estimation:

More than likely, the leadership would be on the more aggressive side, concerned less with religious rulings and more with executing the plot to one degree or another. Final estimate is fail deadly.

4. How this factor might change in the next five years.

This is a function of the leadership's primary goal. If it's lethality, then any kind of detonation anywhere is acceptable. If it's symbolism, then the mere presence of having a viable device itself would suffice. They would both elicit an aggressive and expensive reaction from the US government. Both would serve to draw attention to the cause domestically. But an inert bomb would be better in terms of not running the risk of alienating a huge swath of one's potential target audience who would be turned off from this ideology by the mass numbers of casualties, which would invariably include Muslims.

III. Conclusion

Overall, based on all current knowledge of the group what type of nuclear C&C do you think the group would employ and why?

There is little doubt in my mind that the leader of a homegrown cell in the US would seek to hold on to as much control over the cell as possible. This would be for minimizing potential breaches in OPSEC as well as ensuring that the deployment is done up to his standards. The biggest challenge for a cell leader would be finding and relying on the technical expertise that it would require to detonate this device in the case that he did not possess it. Time would be a critical factor in the cell leader's calculus, likely sacrificing ideal circumstances for just ensuring that the device is detonated.

If the leader were to be compromised during the course of the execution, then it is likely that the cell would either hesitate to go through with the operation or be willing to improvise an attack. But as long as the leader is engaged, most major decisions would likely have to go through him. Final estimate: assertive.

Profile 6: Al-Qa'ida in the Arabian Peninsula (AQAP)

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I. Pre-Analysis

A. General Background of the Group

Al-Qa'ida in the Arabian Peninsula, or AQAP, has come to be the most active and visible of the al-Qa'ida regional affiliates.⁸³² Since its inception in 2006, the group has been able to seize and hold territory in Yemen and, build an advanced global media capability, and has, therefore, risen to the level of a major security concern for the United States.⁸³³ In 2012, the rise of the group's spinoff/subsidiary, Ansar al-Shariah, has embraced winning hearts and minds on the local level.⁸³⁴

AQAP is the most active of the al-Qa'ida affiliates in that it has displayed consistent interest in targeting locally, regionally and globally. Through a series of brazen attempted attacks against targets in Yemen, Saudi Arabia and the United States, AQAP is the first among equals within al-Qa'ida's global movement. The history of AQAP in Yemen began 3 February 2006 when prisoners in Sana'a worked for 55 days to dig a tunnel 45 meters long and 5 meters wide in order to escape. Of the 23 prisoners who escaped, 13 were convicted members of al-Qa'ida, including some involved in the bombing of the USS Cole.⁸³⁵

After Said Al-Shehri was appointed as the leader of AQAP in 2007, he recruited fellow Saudis Abu Hamam Al-Qahtani and Ibrahim al-Asiri to join. In short order, the group began displaying an interest in conducting major terrorist attacks. In 2008, al-Asiri, AQAP's master bomb-maker, built a novel suicide explosive device for his younger brother to use in his failed assassination attempt on Saudi Arabia's Deputy Minister of the Interior, Prince Muhammad Bin Nayef.⁸³⁶

In January 2009, Ayman Al-Zawahiri solidified [AQAP's] legitimacy when referring to it by its current name (Qaedat Al-Jihad in the Arabian Peninsula or Qaedat Al-Jihaad fi Jazeerat Al-Arab), and approved Abu Basir al-Wuhayshi, a Yemeni national, as the head of the group. According to the now imprisoned Yemeni al-Qa'ida researcher and supporter, Abdul Haider al-Shai'i, Al-Zawahiri considered Abu Basir's appointment critical to the Jihadist awakening in the Arabian Peninsula, and dubbed him the "Prince of Mujahedeen."⁸³⁷

⁸³² Distilled overviews of the organization are available: "Al Qaeda in the Arabian Peninsula," Anti-Defamation League, June 28, 2012. Available at: <http://www.adl.org/NR/exeres/E950B638-F807-4F5C-9B24-C6FDF35DB783.DB7611A2-02CD-43AF-8147-649E26813571.frameless.htm>; and "Al-Qaida in the Arabian Peninsula," Council on Foreign Relations, May 24, 2012. Available at: <http://www.cfr.org/yemen/al-qaeda-arabian-peninsula-aqap/p9369>; and "Al-Qaeda in the Arabian Peninsula (AQAP)," Jane's, November 5, 2010. Available at: <http://www.janes.com/articles/Janes-World-Insurgency-and-Terrorism/Al-Qaeda-in-the-Arabian-Peninsula-AQAP-International.htm>

⁸³³ Greg Miller and Peter Finn. "CIA sees increased threat from al-Qaeda in Yemen," The Washington Post, August 24, 2010. Available at: <http://www.washingtonpost.com/wp-dyn/content/article/2010/08/24/AR2010082406553.html>

⁸³⁴ One of the best explorations of the intersection between Ansar al-Shariah and Al-Qaida in the Arabian Peninsula is: Christopher Swift, "Arc of Convergence: AQAP, Ansar al-Shari'a and the Struggle for Yemen," The Combating Terrorism's CTC Sentinel, June 21, 2012. Available at: <http://www.ctc.usma.edu/posts/arc-of-convergence-aqap-ansar-al-sharia-and-the-struggle-for-yemen>

⁸³⁵ For more information about the post-escape paths of those individuals, see: Gregory D. Johnsen, "Tracking Yemen's 23 Escaped Jihadi Operatives – Part 2," Terrorism Monitor, Vol. 5, No. 19 (October 2007). Available at: [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[swords\]=8fd5893941d69d0be3f378576261ae3e&tx_ttnews\[ny_of_the_words\]=Yemen&tx_ttnews\[pointer\]=3&tx_ttnews\[tt_news\]=4466&tx_ttnews\[backPid\]=7&cHash=dc7a3e8ab7](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[swords]=8fd5893941d69d0be3f378576261ae3e&tx_ttnews[ny_of_the_words]=Yemen&tx_ttnews[pointer]=3&tx_ttnews[tt_news]=4466&tx_ttnews[backPid]=7&cHash=dc7a3e8ab7)

⁸³⁶ "Profile: Al-Qaeda 'bomb maker' Ibrahim al-Asiri," BBC News, May 9, 2012. Available at: <http://www.bbc.co.uk/news/world-middle-east-11662143>

⁸³⁷ Abdul Ila Haidar Sha'i, "Reviving the dead: The Yemeni Government and Al-Qaeda's Resurgence." Available at: <http://www.arabinsight.org/aiarticles/229.pdf>

The introduction of two Americans, Imam Anwar al-Awlaki and Samir Khan, drastically upgraded the group's ability and seeming interest in attacking western targets, particularly the United States.⁸³⁸ However, with Awlaki's and Khan's demise, the group's interest in continuing to pursue Western operations must be questioned as it remains unclear how, if at all, their deaths affect AQAP's capacity or commitment to conducting direct attacks against the United States.

B. Identification and Brief Exploration of the Group's Key Decision Maker(s)

Al-Qa'ida in the Arabian Peninsula (AQAP) is the official al-Qa'ida affiliate organization operating out of Yemen. It is an outgrowth of various al-Qa'ida elements historically operating across the Arabian Peninsula, and it is now the lead al-Qa'ida affiliate in the region.⁸³⁹ Its subsidiary, Ansar al-Shariah, which emerged as a formal entity in 2009, has now adopted the same stylized marketing and operational hallmarks of AQAP proper.⁸⁴⁰

Despite facing growing counterterrorism pressure from US drone strikes, the senior AQAP leadership remains more or less intact. The general personality of the leadership is one of superiority and self-righteousness.⁸⁴¹ The leadership believes that the group is appointed by God to lead the resistance against impiety and the perversion of Islam within the region. AQAP will become the tip of the metaphorical spear that will be used to strike terror in the hearts of all those who seek to deny Islam or exploit, oppress and persecute righteously guided Muslims.

AQAP's perception of itself and its goals are based on a negative conception of reality embodied in the statement of an AQAP in-house scholar and Guantanamo detainee:

"Our ummah nowadays is sinking in a swamp of blood...Our ummah is in a pitiful condition where all the enemies are controlling it. There is no single nation that has been humiliated and harmed as much as our ummah. The calamities are various and the sorrows are many in our Ummah; in every Islamic country, we can find calamities, wounds, and sufferings. What worsened the situation is that our ummah has been divided into sects and factions, which fought against each other. This division gave our enemy the chance to be only an observer, because the people from within the ummah are carrying out the work in behalf of the enemy."⁸⁴²

For AQAP, Muslim nations are being attacked from all sides, facing a global conspiracy from Jews and Crusaders working hand-in-glove with apostate Arab governments, particularly that of the Saleh regime in Yemen and the Al-Saud royal family, as well as the Iranian governments who are leading a Shia war against Sunnis – most importantly by backing the Huthis in Yemen and Shia minorities within Saudi Arabia. This should not come as a surprise, however. As AQAP describes today's reality,

"All over ages, struggle has continued between two parts; a part that represents the truth and its people and a part that represents falsehood and its people."⁸⁴³

⁸³⁸ "Al Qaeda's Anwar al-Awlaki killed in Yemen," CBS News, September 30, 2011. Available at: http://www.cbsnews.com/2100-202_162-20113732.html?pageNum=2&tag=contentMain:contentBody

⁸³⁹ The most recent profile of AQAP's living senior leaders was penned by Gregory Johnsen. Gregory Johnson, "A Profile of AQAP's Upper Echelon," CTC Sentinel, Vol. 5, No. 7 (July 2012), pp. 6-8. Available at: <http://www.ctc.usma.edu/wp-content/uploads/2012/07/CTCSentinel-Vol5Iss72.pdf>

⁸⁴⁰ "Interactive: Fractured Yemen," Al-Jazeera, June 5, 2012.

⁸⁴¹ Whitlock, Craig. "Al-Qaeda's Yemen affiliate widens search for recruits and targets," Washington Post, November 30, 2010.

Available at: <http://www.washingtonpost.com/wp-dyn/content/article/2010/11/29/AR2010112905459.html?sid=ST2010112905490>

⁸⁴² Shaykh Ibrahim al-Rubaysh, a Saudi former Guantanamo detainee and an AQAP-affiliate Islamic scholar. In the audio statement, entitled "How Could You Abandon Jihad," April 16, 2010.

⁸⁴³ Editor-in-chief of the Sada al-Malahim magazine, "And the End Is Best for the Righteous," *Sada al-Malahim*, Issue 14, disseminated by the Al-Fajr Media Center, December 4, 2010.

AQAP has arisen as the vanguard of the mujahidin of the Arabian Peninsula, joining its brothers in arms in places like Afghanistan, the Islamic Maghreb, Iraq, Somalia, Chechnya and more, to fight back against and restore the glory of Islam. Its leadership believes that there is a need for immediate, aggressive action and that the only way to achieve victory is through sacrifice/martyrdom. Importantly, AQAP has historically tailored its deployment of each of these narratives to address four different levels of audiences, including the individual, the domestic Yemeni Sunnis, Sunnis across the Arabian Peninsula and the global ummah.

With this mission underlying its structure and operations, the AQAP leadership has been able to create an effective organization in Yemen. The leadership operates in an environment where tribal loyalty to its members and antipathy for the central Yemeni government ensures both hospitality and protection.

The ability for the AQAP organization to recruit at home and import new members is critical to their own self-understanding, one that is fundamentally shaped by their belief in the inevitability of the rise of an Aden-Abyan Army that was mentioned by the Prophet Muhammad. The Prophet claimed that “An army of twelve-thousand will come out of Aden-Abyan. They will give victory to Allah and His messenger; they are the best between myself and them.” Senior jihadist shaykh, Abu Muhammad al-Maqdisi, added to this belief:

“Some of those who spoke about this hadith said that in it there is a pleasant indication that the Caliphate could initiate in Aden-Abyan and that Yemen would be the capital of the Caliphate because armies usually move out from the headquarters of the Caliphate.”⁸⁴⁴

It is this belief – that from out of Yemen an Islamic army of twelve-thousand Muslim soldiers will march through the Arabian Peninsula, purifying it of non-Islamic influence and culminating in the establishment of the Caliphate, that AQAP is able to continue justifying its significance and recruit an ample supply of young men into their organization. It is also what has led it to be among the most operationally aggressive among the al-Qa’ida affiliates.⁸⁴⁵

AQAP’s operations are brazen and bold. It employs creativity in its methods – almost to the point of Hollywood. It is ruthlessly dedicated to its mission, responsive to its audiences and propagandizes aggressively. Like its predecessor organization based in Saudi Arabia, AQAP has prioritized the importance of seamlessly melding operations with media.

C. Ideology

AQAP adheres to but needs to be understood apart from the al-Qa’ida Senior Leadership’s classic ideological precepts. It subscribes to all the same tenets of Al-Wala wal-Bara (loyalty and disavowal), the understanding of jihad as violent and immediate, and the political assumptions about Islam being under siege by a Zionist-Crusader conspiracy that has co-opted and coerced Arab and Muslim governments to abandon their duty to God and supplant it with the quest for fortune at the expense of their faith and people.⁸⁴⁶ What makes AQAP slightly different in its application of the al-Qa’ida ideology is its Yemen-first approach, which presupposes that AQAP is the first among equals within al-Qa’ida’s global movement and the rightful torchbearers of the work that bin Ladin and Zawahiri began but will be unable to continue.

Senior jihadist intellectual, Akram Hijazi, has commented on the AQAP mindset, arguing that it is seeking to extend the philosophy of now dead al-Qa’ida commander, Abu Musab al-Zarqawi. According to Hijazi, AQAP’s emir, Nasir al-Wuhayshi, told the Yemeni journalist, Abd-al-Ilah Haydar al-Sha’i, that “The operation

⁸⁴⁴ Abu Muhammad al-Maqdisi. “Role of Yemen in Present-day Events in Light of Hadiths of Prophet Muhammad,” May 31, 2011. Available at: <http://www.tawhed.ws>

⁸⁴⁵ For a more thorough discussion of the Aden-Abyan thesis, see: Gregory Johnsen, “The Resiliency of Yemen’s Aden-Abyan Islamic Army,” Jamestown Foundation’s *Terrorism Monitor*, Volume: 4 Issue:14, July 13, 2006.

⁸⁴⁶ For a more in-depth discussion of AQAP’s ideological position, see: Abdul Hameed Bakier, “Al-Qaeda Leaders in the Arabian Peninsula Speak Out,” The Jamestown Foundation, January 28, 2009. Available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=34420

that targeted the Safir Oil Company and Al-Dabbah in September 2006 was carried out according to the orders and directions of the amir of al-Qa'ida in the Land of the Two Rivers, Abu-Mus'ab al-Zarqawi.⁸⁴⁷ For Hijazi, AQAP was not simply another independent al-Qa'ida affiliate pursuing an agenda that it deemed to be in its own parochial self-interest. Rather, they were being guided by a deeper commitment to fulfilling the targeting strategy – local, regional and global – of al-Zarqawi.

After Usama bin Ladin's death, the AQAP emir, al-Wuhayshi, issued a scathing indictment against the United States in his eulogy to bin Ladin.⁸⁴⁸ Al-Wuhayshi foreshadowed that the attacks they have planned are, "greater and worse". He lectured to an American audience, "You have to fight one generation after the other, until your life is ruined, your days are disturbed and you face disgrace. The fight between us and you was not led by Usama alone." AQAP's commitment to exacting vengeance against the United States for bin Laden's death seemed clear. The harder question to answer was the kind of relationship that AQAP planned to maintain with al-Qa'ida in a post-bin Ladin world, one where Ayman al-Zawahiri was the new emir of al-Qa'ida's central command.

Al-Wuhayshi publicly committed that he and the AQAP fighters under his command would follow al-Zawahiri's orders and fight, "the enemies without leniency or surrender until Islam rules."⁸⁴⁹ According to al-Wuhayshi, who directed his comments directly to al-Zawahiri, "I give you allegiance of obedience in good and hard times, in ease and difficulty, in following the Book of Allah and the Sunnah of Allah's Messenger, Allah's peace and prayer be upon him, and in fighting the enemies of Allah as much as I can – myself and the loyal soldiers who are with me in the front of the Arabian Peninsula." This pledge of allegiance is important because it subordinates AQAP's leadership to that of al-Qa'ida's central command, suggesting that an attack as monumental as a nuclear device deployment would need to be run past al-Zawahiri. Whether or not al-Wuhayshi's statements were more a rhetorical flourish, designed to cement support for AQAP across the broader al-Qa'ida movement, or were an authentic pledge of allegiance is difficult to know.

AQAP's leadership has been open about the way that its religious understanding impacts its thinking on nuclear weapons. According to AQAP's emir, Abu Basir al-Wuhayshi, during an interview (released January 2009) with the now imprisoned Yemeni journalist Abd-al-Ilah Haydar al-Sha'i:

"[Sha'i] You were among those close to Shaykh Usama. You were also his private secretary, which means that you accompanied him for a long time, and that you were informed of files that the rest of the world does not know of. Among these files, is the recent discussion that took place in the American intelligence agencies and American media on whether Al-Qa'ida owned or had the potential to own nuclear, biological, and chemical or any unconventional and mass destruction weapons. Does Al-Qa'ida own such weapons?

"[Abu-Basir] Praise be to God, it is a religious duty for Muslims to own such weapons for self defense, this is what they are required to do according to the Shari'ah. Another thing, did the mujahidin really own such weapons? I say yes. Shaykh Usama Bin Ladin has confirmed it in his interview with Pakistani journalist Hamid Mir. He mentioned it and stated that such a weapon is owned by the mujahdiin as a deterrence weapon. This is what God the Almighty, glory be to Him, ordered and Muslims have to abide by it. God also ordered Muslims to prepare themselves: 'Against them make ready your strength to the utmost of your power' [partial Koranic verse, Al-Anfal, 8:60]. This is a weapon that Muslims should own.

"[Sha'i] If Al-Qa'ida has a nuclear weapon or a deterrent weapon, why has it not used it in the 11

⁸⁴⁷ Akram Hijazi. "A Scrutinizing of AQAP's Mentality and Wars." Published to the Shumukh al-Islam Network, December 14, 2010.

⁸⁴⁸ "Al-Qaida leader warns of 'worse to come' in eulogy to Bin Laden," The Guardian [printed from "Reuters in Dubai"], May 11, 2011. Available at: <http://www.guardian.co.uk/world/2011/may/11/al-qaida-leader-warns-in-eulogy-to-bin-laden>

⁸⁴⁹ Bill Roggio, "AQAP leader pledges oath of allegiance to Ayman al Zawahiri," The Long War Journal, July 26, 2011. Available at: http://www.longwarjournal.org/archives/2011/07/aqap_leader_pledges.php

September attacks?

"[Abu-Basir] This was the first message in the hope for them to understand through the many messages."⁸⁵⁰

There can be no disputing that, from this interview and other similar comments, AQAP's leadership believes that it has a religious duty to pursue and obtain a WMD, including a nuclear weapon, as a means of deterrence. Abu Basir has not gone so far as to suggest that al-Qa'ida, be it their regional affiliates or senior leadership, has a duty to deploy such a weapon.⁸⁵¹

AQAP's leadership seems to have a firm understanding for the ways of international politics and the global media. Their statements show some level of nuance and long-term focus. For the AQAP leaders, tactical goals or short-term gains are secondary at best to the long-term battle of perception and broader strategic trajectory that they believe they are on. Therefore, they are likely to avoid sacrificing their long-term strategic goals for tactical expediency. That said, al-Qa'ida's group in Yemen has advocated for a wide array of low-tech tactics for how individual lone wolves can begin conducting terrorism. They have introduced ideas as wide-ranging as arson, electrocution, poisons, homemade explosives, assassination with firearms and even vehicular homicide.⁸⁵²

All of al-Qa'ida's affiliates face a paradox in terms of pursuing their regional/global political goals vis-à-vis their need to maintain momentum and prove to young recruits that they are the leading affiliate. What AQAP does differently is openly explain that its operations are meant to not simply achieve tactical or operational goals, but to establish itself as a legitimate and influential political force. Consider this excerpt from an article in AQAP's Arabic-language magazine, *Sada al-Malahim*:

"By destroying this fear, the mujahidin have achieved their presence in the arenas of conflict. They have proven that they are a political force that cannot be underestimated. He who has the ability to respond and maneuver will be feared by countries and taken into consideration. These are the real policies that are based on power, not concessions and negotiations at the cost of principles and faith."⁸⁵³

It is this dynamic interplay between its religious/theological goals with its political/strategic objectives as well as its tactical/operational capacity and its local/regional/global geographic interests that makes it difficult to predict AQAP's targeting calculus.

D. Constituents

AQAP has multiple constituencies, as any al-Qa'ida affiliate might, but in contrast to other affiliates, AQAP is more willing to explicitly identify and appeal to different constituencies drawing on different arguments, mediums and personalities. One could enumerate them as follows:

1. Core AQAP membership – keeping them in the fight by proving that they are fighting a worthy and winning battle.
2. Broader support base in Yemen and Saudi Arabia – convince them that AQAP is fighting on their behalf and persuade them to join the cause, or at least avoid standing in its way.

⁸⁵⁰ Yemeni journalist Abdul Ila Haidar al-Sha'i's interview with Abu Basir al-Wuhayshi. Broadcast on Al-Jazeera, January 29, 2009. Available in transcript form at: www.abdulela.maktoobblog.com.

⁸⁵¹ "AQAP wants WMD, official says," United Press International, February 17, 2012. Available at: http://www.upi.com/Top_News/Special/2012/02/17/AQAP-wants-WMD-official-says/UPI-64341329489915/

⁸⁵² "Al-Qaeda magazine back, calls for firebombs in U.S.," Agence-France Presse, May 02, 2012. Available at: http://www.google.com/hostednews/afp/article/ALeqM5iM32a47XYV2VBTmht9PNf_wfXnjw?docId=CNG.7412dd54b87ea291d56a48b3e0f95f30.221

⁸⁵³ Salih al-Salih, "A successful or Failed Operation?", *Sada al-Malahim*, Issue 12, February 2010.

3. Broader population, including tribes, in Saudi Arabia and Yemen – prove to them that their ruling government is fighting against them and that AQAP is waging a justifiable and religiously legitimate fight that will improve their lives.⁸⁵⁴
4. Yemeni government – use fear to deter it from fighting back and to step down.
5. Saudi government – terrorize it and convince it that its members are apostates.
6. Muslims worldwide – demonstrate to them that AQAP is part of a legitimate and religiously mandated cause that they need to support or at least not actively work against.
7. Western governments, most notably the United States Government – terrorize them and try to convince them to withdraw support for Arab governments around the region.

Each of these constituencies is vital in its own way to AQAP's global messaging strategy. Again, since AQAP believes that operations and media need to be seamlessly interwoven, each constituency requires its own strategy, some of which may be complementary to one another. AQAP can afford to ignore one or more at any given time but cannot afford to alienate its core membership or regional support base.

AQAP's leadership seems to have a clear-headed understanding that they have a lot of work to do in capturing the hearts and minds of the tribal population around Yemen. That said, its approach tends to be more belligerent, demanding and condescending than one might imagine a group in need of persuading a skeptical audience ought to be.

Importantly, their global support movement does tend to encourage AQAP to continuously increase the pain that they inflict against the United States, even if it means resorting to the use of weapons of mass destruction. For instance, one online jihadist forum participant argued that AQAP has "declared total war on the United States" by claiming responsibility for the Christmas Day 2009 airplane bombing attempt. According to the poster,

"total war will usher in new tools on the battlefield. As a psychological specialist, I strongly feel that this term -- total war -- was not used lightly or simply to make the statement more verbose. Having followed the operational line of the leaders of the organization, I can say that they possess a sort of operational ingenuity. This is represented by their success in planning for their spectacular escape from prison, their building the organization from scratch, merging with another (Al-Qa'ida in the Land of the Two Mosques), starting a war of attrition against the Yemeni regime, expanding toward launching strikes against regional targets (the assassination attempt on the Saudi deputy interior minister [Muhammad Bin-Nayaf]), and expanding internationally and reaching the United States. This rapid growth of the regime highlights a military prowess that is capable of overcoming any obstacles on the path to achieving its goals. This causes me to doubt that the matter is related to frightening weapons and weapons of mass destruction that could also be concealed and go undetected by scanning equipment, as was the case with the concealed bomb! [These weapons] could be used in public places or water storage facilities. No one can predict what might happen at that point!"⁸⁵⁵

Postings like this demonstrate the ways in which the global support movement can interpret operational failures as indicators of AQAP's strategic success.

⁸⁵⁴ For more on AQAP's efforts to message directly to the people of Saudi Arabia, see: "Excerpt from Al-Qaida in Yemen's (AQIY) Magazine: Sada al-Malahim – 'The Responsibility of the People of Yemen Towards the Holy Sites of the Muslims and Their Wealth,'" The NEFA Foundation, April 2009. Available at: <http://www.nefafoundation.org/miscellaneous/NEFA%20AQIY%200409%20part%202.pdf>

⁸⁵⁵ Jihadist Forum Poster, "The Detroit Raid and the War of Minds." December 29, 2009.

AQAP is continuously seeking greater levels of support from across its Yemeni and Saudi potential recruitment pool. In response to this, AQAP leadership has been extremely open, candid and at times, desperate, to increase the support from across these constituencies.

AQAP has also sought to bolster the support that they receive across the broader Middle East. They approached the Arab Spring revolutions as a positive outcome, but one that was only the first step in a longer campaign. In December 2011, for example, Shaykh Ibrahim al-Rubaysh, AQAP's Shariah official, reached out to Muslims across Egypt, Libya and Tunisia, prodding them to continue forward in their revolution,

"My advice to the people in Egypt, Libya, and Tunisia is to not suffice with the victory of ousting their tyrants and minor achievements. However, they should maintain their revolution and put an end to the quislings of the former leaders. The United States sacrificed the former leaders of these three countries hoping to find replacements for them in the future. I also advise the people in Yemen and Syria to stay steadfast and to continue their attempts to gain their freedom and to overthrow their leaders."⁸⁵⁶

These kinds of appeals/directives are commonplace across AQAP's external media. Whether or not it has the intended impact is difficult to assess.

Despite AQAP's ongoing pleas for support from the people of Yemen, the tribes or the broader al-Qa'ida support movement, AQAP does not seem to alter its targeting strategy in order to pander for this support. In some ways, it seems as if AQAP believes it knows best about the kinds of operations that must be pursued and its pleas to those constituencies is made in the abstract, or disconnected from those operations. In other words, AQAP will boldly announce that its attacks were legitimate, justified and strategically successful. Any calls for increasing support may point to those attacks as proof for why a given constituency should support AQAP but it does not seem to feel the need to justify its attacks in order to maintain support.

Financial Backing

Little is known in the open source about the specific methods or the extent to which AQAP receives donor funding. The International Institute for Counter-Terrorism at Herzliya has argued that the "primary source of funding is private donations," particularly "donations from Saudi Arabia."

Some of their funding is also presumed to be coming from local and regional charities as international funding for their activities has been restricted by a series of U.S.-led moves. In January 2010, the United States listed AQAP as a Foreign Terrorist Organization under Section 219 of the Immigration and Nationality Act.⁸⁵⁷ Furthermore, AQAP's top leaders, al-Wuhayshi and al-Shehri were also designated under E.O. 13224, which prohibit the supply of material support and weapons to their organization and stymie the flow of money to AQAP.

If the preponderance of AQAP's funding comes from local sources, AQAP's leadership would likely view a nuclear attack as being in their favor so long as it did not detonate in an Islamic country and did not result in an American military occupation of Yemen. AQAP's leaders would likely believe that their funders do not want American boots on the ground in that country.

AQAP's leadership likely believes that their funders would view a premature detonation in an Islamic country as cataclysmic. It would effectively short-circuit any future funding as the reputational impact for being tied to a terrorist group that wrought that much death and destruction on Muslim soil would be highly negative.

⁸⁵⁶ Shaykh Ibrahim al-Rubaysh. "Harvest of Revolutions." Al-Malahim Media. December 29, 2011.

⁸⁵⁷ "What Governments Are Doing: Al Qaeda in the Arabian Peninsula," The Government of Australia. Available at: http://www.ag.gov.au/agd/WWW/NationalSecurity.nsf/Page/What_Governments_are_doing_Listing_of_Terrorism_Organisations_Al-Qaida_in_the_Arabian_Peninsula

Links to State Sponsor(s)

There is no indication of a state sponsor of AQAP's operations. Quite the opposite, they have posed security challenges for both the Iranian and Saudi governments. AQAP could potentially garner support within pockets of some regimes, most likely in Saudi Arabia, if it turned its focus to conducting attacks against Iran and the Shi'a. AQAP has been vocal on the need to kill Shi'a and it is not unforeseeable that, in order to bolster support or ease security pressure off their operations in Yemen, that they could direct their focus to attacking Iran directly or the Shia minority populations within Yemen.

AQAP has previously argued that Iran is directly seeking to arm Shia across the Gulf. "Iran has started to move its arms into the areas in which its followers are present, inside the Land of the two Holy Mosques, as we see the events that are taking place nowadays in Al-Qatif Province, such as the demonstrations and operations with light weapons against the police patrols and others," argued Sa'id al-Shihri, deputy amir of AQAP.⁸⁵⁸ "This is an indication that the situation is approaching an escalation toward war, and by doing this, Iran wants to occupy the Al Sa'ud government with internal matters and probe its reactions to them." Importantly, for al-Shihri, "other scholars in the Land of the two Holy Mosques had previously issued a fatwa that provided for the nonbelief of the Rejectionists in the Land of the Two Holy Mosques." For him, that means that Iranian agents can be killed and their money taken. He explains,

"The verdict of killing comes first and their money must be taken as spoils of war by Muslims, for they have very big businesses in the Land of the two Holy Mosques that support the Rejectionist project. It is a duty to take all this money and put it in the banks of Muslims, instead of taking the money of the Muslim Sunni people and freezing them for the mere accusations of supporting the frontiers of the Sunni people in Iraq, Afghanistan, and elsewhere."⁸⁵⁹

There is no doubt that a systematic campaign against Iranian government interests would elicit some interest among individuals currently within the Saudi government. Whether or not that would amount to state support or an official policy of providing covert aid to AQAP is unknown. But it would most likely lead to, at minimum, a reduction of security pressure with regard to their operations against Iran.

AQAP's leaders likely believe that the level of funding for their activities from Sunni sponsors would increase if they mounted any major attack against a Shia state like Iran. Even if the bomb were to only fizzle, they would be invariably looked at in some corners of particular regimes as potential instruments for advancing other national policies vis-à-vis Iran.

E. Specialists in the Group

AQAP does not have a known specialist who would possess the requisite technical know-how to construct a nuclear device. The most advanced technical expert AQAP is known to have that handles explosives is Ibrahim al-Asiri, the group's lead bomb-maker. Although he is inventive and highly skilled at making conventional explosives, he is nowhere near qualified to handle anything more than a dirty bomb. The only viable scenario is that AQAP would be able to secure the expertise of a government scientist from a country such as Pakistan or Saudi Arabia or possibly Iran but there are no known examples of this occurring.

F. Existential Challenges to the Group

AQAP has had a mixed track record in assembling and deploying explosive devices. In October 2010, they successfully sent parcels by way of American bound cargo planes that, although eventually detected, sent shockwaves through America's security apparatus.⁸⁶⁰ On Christmas Day, 2009, AQAP successfully deployed Umar Farouk Abdulmutallab, whose underwear was laden with explosives, on a plane bound for the U.S. His explosives were not detected until he attempted to detonate them. AQAP's most recent attempt

⁸⁵⁸ Sa'id al-Shehri. "And Incline Not to Those Who Do Wrong." Al-Malahim Media. March 7, 2012.

⁸⁵⁹ Ibid.

⁸⁶⁰ William Lowther, "Yemen parcel bombmaker believed to be al Qaeda terrorist Ibrahim Hassan Al Asiri." Telegraph.co.uk, October 30, 2010.

to deploy a follow-up suicide bomber strapped with al-Asiri's next generation bomb was, however, interdicted due to the fact that the United States had penetrated the group thanks to a Saudi double agent.⁸⁶¹ It is not clear, then, whether the AQAP leadership would believe that they could build, deploy and detonate a nuclear device without the United States gaining knowledge of it beforehand.

If AQAP's leadership did believe that the United States gained knowledge of the weapon before they had successfully deployed and/or detonated it, they would likely anticipate an all-out assault against their bases in Yemen, their senior leadership and any global network they might have.

Based on the American government's success targeting senior al-Qa'ida personnel, the AQAP leadership is likely aware that they are vulnerable to further U.S. preemptive attacks.

The AQAP leadership likely believes that their safe-houses and senior leaders are viable targets and would likely anticipate that they would come under heavy U.S. fire from unmanned aerial drones, missiles and bombs.

AQAP's leadership could also view itself as being ahead of the metaphorical curve vis-à-vis American intelligence. AQAP been able to penetrate Western security defenses – including the Christmas Day 2009 attempted bombing by Umar Farouq Abdulmutallab of the Detroit bound Northwest Airlines flight and the series of package bombs deployed against American package carrier planes. It is its track record and its ardent belief of the religious legitimacy of its cause that AQAP leadership likely believes that if/when it is able to obtain such a device, it will be too late before the U.S. becomes aware of its existence.

AQAP's leadership, which has been witness to the increased American commitment to pursuing its organization in Yemen with drone strikes, would likely assume that the United States would respond with overwhelming force against it. It likely believes that the U.S. would forgo all Yemeni claims of sovereignty and potentially put U.S. boots on the ground, but likely that the U.S. would double-down in Yemen.

It seems that AQAP is most sensitive to being compromised by tribes or locals who have been turned into spies against them. It is this near threat of the people in whom they are forced to place their trust that is likely most concerning to AQAP, which might be why its leadership tends to both desperately appeal to these constituencies on one hand but openly threaten and condescend to them on the other. For instance, in December 2009, AQAP issued a statement that exemplifies the way they directly appeal to, even direct the efforts of, local tribes.

"Finally, we call all the lofty tribes In Yemen, who are the people of reinforcement and support, and the people of the Arabian Peninsula to confront the Crusade and its agents in the peninsula of Muhammad, peace be upon him, by targeting their military bases, embassies of intelligence, and their fleets located in the waters and soils of the Arabian Peninsula until we stop the recurrent massacres against Muslims."⁸⁶²

These partial requests/partial directives are, again, commonplace when examining AQAP's broader set of media releases. They suggest that the group views their local partners and hosts as simultaneously their best hope and single largest potential point of failure.

⁸⁶¹ Eyder Peralta, "CIA Thwarts Newer, More Sophisticated Underwear Bomber, National Public Radio, May 7, 2012. Available at: <http://www.npr.org/blogs/thetwo-way/2012/05/07/152207969/reports-cia-thwarts-new-more-sophisticated-underwear-bomber>

⁸⁶² Al-Qaida in the Arabian Peninsula. "A Statement About the Massacre of Muslims in Abyan," Al-Malahim Media, December 27, 2009.

The American-led strike that killed Anwar al-Awlaki had to have shaken up the AQAP leadership in terms of showcasing the capabilities of American drones.⁸⁶³ This may have changed the level of intelligence that the AQAP leadership believes that the United States can obtain on their senior personalities and/or operations. But specific intelligence aside, there would be little doubt that any detonation of a nuclear device by AQAP against an American target would result in a guaranteed backlash campaign that would likely not subside until that leadership was rooted out.

II. Factor Analysis

A. The Leadership's Tolerance for Uncertainty

1. Arguments for High Tolerance:

- AQAP believes that its operatives have strong OPSEC skills and training (cell communication, tradecraft)
- There seems to be little organizational concern with failure. They tend to be more focused on taking big risks through daring and clever operations. There has clearly been more concern with novelty and outsmarting the United States than there is with mitigating risk.⁸⁶⁴

AQAP's leadership continues to demonstrate an intense, persistent interest in attacking the United States despite the fact that multiple attempts have either been thwarted or failed. Nonetheless, it continues pursuing, which suggests that failure does not seem to bother it and/or it is obsessed with trying until it is successful. Either way, AQAP is likely to empower its operatives who it believes are well trained to execute the mission however possible, even if they fail.

AQAP is not known for having robust theological expertise in-house. Its chief clerics are predictable in their support for the AQAP leadership and operations. Therefore, the leadership would have little reason to doubt that the attack is religiously acceptable.

AQAP's political goals vis-à-vis the United States may have changed slightly since the death of bin Ladin and the seeming collapse of the senior leadership. Whereas before it was relegated to the first among equals within the 'regional affiliate' cadre, there is a strong possibility that AQAP will inherit the torch by default when the senior leadership collapses, thereby making it the vanguard of the global al-Qa'ida movement. It is for that reason, then, that it may recalibrate its goals – which would probably look like an increase in the need to establish themselves globally and publically as leading the charge for a new generation and era of al-Qa'ida.

The goals would probably be tiered:

- Demonstrating to its core constituency that it is the most capable al-Qa'ida organization in the world.
- Demonstrating to the United States that it is both willing and able to conduct attacks on par with if not far surpassing those of 9/11.
- Using the threat of future attacks as a lever to compel the US and other Western countries to alter their calculus in terms of dealing with al-Qa'ida. It would likely issue a laundry list of demands in the immediate aftermath, capitalizing on the media attention and the global fear that would ensue.

⁸⁶³ See, for example, Mohammed Jamjoon, "Source: Yemen Airstrike Kills al Qaeda deputy," CNN, December 18, 2009. Available at: http://articles.cnn.com/2009-12-18/world/yemen.alqaeda_1_yemeni-government-official-al-qaeda-airstrike?_s=PM:WORLD; and, Hakim Almasmari, "Senior al Qaeda operative killed by airstrike in Yemen," CNN, May 06, 2012. Available at: http://articles.cnn.com/2012-05-06/africa/world_africa_yemen-airstrikes_1_zinjibar-yemeni-prison-al-qaeda-militants?_s=PM:AFRICA

⁸⁶⁴ In one of the parcel bombs deployed by AQAP, a book was included. AQAP later revealed that the book was *Great Expectations* by Charles Dickens, an ironic gimmick meant to symbolize AQAP's hopes for follow-on attacks. For more, see: Bruce Reidel, "AQAP's 'Great Expectations' for the Future." Combating Terrorism Center's CTC Sentinel. August 1, 2011.

According to the former director of the U.S. National Counterterrorism Center, “The potential threat of weapons of mass destruction, likely in a simpler form than what people might imagine but still a form that would have a significant psychological impact, from Al Qaeda in the Arabian Peninsula in Yemen, is very, very real.”⁸⁶⁵

Because of their tiered priorities, local, regional and global, AQAP has to speak to several audiences at once. On the one hand, they have to pander to the local Yemeni audience. At the same time, they are calling to the regional Gulf audience, particularly to members of the Saudi military and security services. Then, they have to try and satisfy the global al-Qaida audience, including the online supporters. These supporters do not all speak Arabic, meaning that AQAP has had to pioneer a second stream of communication devices in the movement’s lingua franca, English.

AQAP has to consistently demonstrate that it is religiously sanctioned while proving that it is politically justified in its use of such a device. It has to avoid alienating the broader Islamic community while sticking it to the U.S. as much as it can. It is a difficult balancing act as each of these constituencies have differing priorities, support levels for their agenda and tactics, and knowledge base.

Because the group is small and hand-picked, the cell leaders’ concern about the internal reliability of the group members is not that high. The leaders would be more focused on trying to get the device into the country and detonated. With a high degree of tolerance for uncertainty, the leaders are likely to be more willing to allow their cell members to live at their homes and maintain their usual schedules before the attack.

Given the string of attacks that have been conducted already by AQAP in recent years, it seems to have an organizational maturity that would lead it to make systematic and rational decisions in its targeting.

2. Arguments for Medium Tolerance:

The difficulty in acquiring such a device combined with the fact that AQAP would probably only have one such device would suggest that it would feel more pressure to successfully carry out its attack than it would for a conventional explosives-based attack. AQAP would, therefore, likely advocate flexibility but also play its cards tight just to make sure they executed the attack.

The thwarted second “underwear” bombing occurred because American intelligence, working with its Saudi counterparts, was able to place an operative into AQAP. After receiving the explosive device, the operative promptly turned it over to his Saudi handler. There should be little question that a security breach to that degree would cause panic internally about what other individuals may have been compromised.

The leadership would likely be torn between its desires to execute the attack with its need to protect itself from any potential religious backlash that it has violated Shariah rulings on weapons of mass destruction. Without a robust and well-established religious clerical presence, the leaders are forced to rely on spin and its power of persuasion over a heavyweight clerical defense.⁸⁶⁶

AQAP’s political goals are now more visible, and perhaps meaningful, than they had been prior to the impending collapse of al-Qa’ida’s senior leadership. With AQAP now competing for the role of vanguard of the global al-Qa’ida movement, the articulation of its goals becomes more reflective of the kinds of methodologies it might use. Having to tier its political goals across local, regional and global concerns, it may be torn in several directions trying to please multiple constituencies at once. AQAP is currently

⁸⁶⁵ Eric Schmitt and Thom Shanker, “Qaeda Trying to Harness Toxin for Bombs, U.S. Officials Fear,” The New York Times, August 12, 2011. Available at:

<http://www.nytimes.com/2011/08/13/world/middleeast/13terror.html?pagewanted=all>

⁸⁶⁶ For example, see, Salih al-Salih, “A Successful or Failed Operation,” Sada al-Malahim, 12th issue. Al-Malahim Media. January 7, 2010.

suffering from some confusion globally regarding its relationship to Ansar al-Shariah. Therefore, the leadership would likely need to ensure that such an attack would fit within the broader brand that it is seeking to advance.

The ultimate question is what would be the point of this attack for the organization. Would it advance AQAP's strategic priorities in the Gulf? It probably would not, other than perhaps serving to galvanize its supporters. It would help to solidify [the group]. AQAP would likely have to be questioning about how its Western adherents would respond to a nuclear attack. The lasting impact of a nuclear attack would ensure that the attack would dominate headlines for years. It would also kill and injure multitudes, rendering it difficult to disentangle the difference between terror and lethality.

The group is likely torn between both extremes. On the one hand, it is finding more success on the ground than ever before. With the rise of Ansar al-Shariah, AQAP seems to be finding more linkages with the local population. This should create a feeling of security and willingness to engage in slightly more uncertain, risky behavior. On the other hand, the recent thwarting of the new underwear plot suggests that Saudi intelligence may have more capability to penetrate their operations.

3. Arguments for Low Tolerance:

In some ways, AQAP's success may actually cause the leadership to take stock of its gains and ensure that it does not backslide by conducting operations that are too risky. In that case, it may have a lower tolerance for uncertainty for risk of losing momentum.

At the same time, the infiltration of the Saudi double agent into the AQAP franchise as a suicide bomber is itself a psychological blow to the leadership's feeling of security about its OPSEC and the likelihood of future operations being compromised. Importantly, that was not the first instance of what AQAP believed to be internal subversion or penetration. In March 2012, AQAP published the 10th issue of their, "The Martyrs of the Peninsula" series.⁸⁶⁷ In it, AQAP discussed the death of one of their commanders, Muwahhid. According to AQAP, he was killed because "one of the spies placed a tracking chip in his car and the US aircraft located it. When his car got together with the car of his brother Ibrahim al-Najdi, may God have mercy on him, the bombing occurred shortly before the evening prayer."

AQAP did report that they subsequently captured the spy that placed the tracking chips and killed him in the presence of Muwahhid's relatives, may God have mercy on him.

The kinds of ideological factors that would decrease the leadership's willingness to employ violence would center on strategic priorities and geographic focus of efforts. If AQAP is making progress in Yemen, detonating a nuclear device in the United States would not necessarily be in its best interest. It could be a distraction to its current efforts, and even prove counterproductive if the U.S. decides to engage militarily on the ground. In many ways, detonating a nuclear device in the United States while AQAP has relatively safe haven on the ground in Yemen would be similar to the dynamic that occurred with al-Qa'ida's senior leadership in 2001. It is not clear whether AQAP would be interested in repeating that calculus.

Sharia dictates over the limitations of mass killing of individuals whose identity cannot be accurately predicted prior to the attack. This would have to be dealt with before such an attack could be conducted. A low tolerance for uncertainty, if religiously motivated, would suggest that the leaders have placed a high level of control over the timing/location of the attack in order to comply with the existing religious protocols for waging such an attack. But given that AQAP's religious scholars are both lightweights and seem to be more functionaries for rubber stamping the group's activities than they do actually issuing critical, thoughtful and informed religious rulings, there is little reason to think that they would feel internally constrained on their ability to take risks.

AQAP's willingness to take risks in order to achieve calculated political objectives would be reduced if it

⁸⁶⁷ "The Martyrs of the Peninsula Series." Issue 10. March 2012.

turns its political focus away from the West. A nuclear attack in the West would not be simply used to kill people but it would be used as a tool for increasing leverage over American foreign policy. If pressuring the US is no longer a top priority, then the need to take high levels of risk in order to execute such an attack would not be necessary or strategically advisable.

AQAP's goals would depend on the strategic and political priorities that AQAP's leadership believes are most important at the time. From there, the tactics, operations, ideology and religious spin will adapt to fit its goals. To date, AQAP seems to have prioritized the spread of terror as a vehicle for causing the United States to spend money on security rather than on destruction. This may be, however, due to the fact that their operations have been consistently thwarted.

AQAP would have a low tolerance for uncertainty if it is concerned about particular constituencies reacting negatively to that action, particularly if Muslims in the United States die in the attack. Although it could try to argue that any Muslim who remains in the U.S. has done so after repeated warnings by al-Qa'ida to return back to an Islamic country, that argument is likely not going to carry weight with Western audiences.

While AQAP is concerned about internal reliability and security, those are still secondary to their ability to pursue their political and strategic goals. They are likely not willing to sacrifice potential operations out of security risk.

The AQAP leadership is unquestionably goal-oriented. And within its own internal calculus, its decisions can be seen as being quite rational in nature, inasmuch as they help the leadership pursue those goals. That logic and calculus is different in kind, though, from a Western calculus and would, therefore be viewed as irrational by some. It is critical to recognize that they are operating from an insurgent position who requires media coverage for relevance and fear tactics as proxies for real-world success.

4. Final Estimation:

AQAP's leadership is likely going to maintain either a very high tolerance for uncertainty if it feels as if it has secured the breach that allowed the Saudi intelligence operative to penetrate their ranks AND it feels certain that it has clear and articulable political objectives vis-à-vis the West. The only way that it would have a low tolerance is if it has exceeded its goals domestically and now has something significant and tangible to lose. Final estimation: High tolerance.

5. Factor Weight:

This factor is likely more important than many of the others to the group. AQAP is at a critical juncture at this point in time. It needs to keep making progress without backsliding. It recognizes that it must seize the metaphorical torch from al-Qa'ida's senior leadership. In that sense, a major attack could either propel AQAP to the next level of status within al-Qa'ida's annals or inadvertently cause the world to turn against it given the uniquely catastrophic and lasting impact of a nuclear detonation. A significant amount of importance seems to rest on the leadership's sense of their political goals and its strategic priorities.

6. How this factor might change in the next five years.

The leadership's tolerance for uncertainty will change over the next five years depending on how its political objectives change. If it finds success on the ground and decides to prioritize the consolidation of its strength, then doing something that will invariably attract increased American military attention would be counterproductive in Yemen. Ansar al-Shariah may in fact prove more successful than they had originally anticipated, which means that, with something to lose on the ground, they may not be as keen on conducting attacks that are more than likely going to provoke a massive military reaction by the United States.

If, however, AQAP is having difficulty galvanizing support on the ground, one way to help their efforts would be to provoke an overreaction from the US in Yemen that leads to civilian deaths and then piggyback on the resultant anti-American sentiment in order to channel more recruits, funding and support in their direction.

Although this strategy might backfire on them domestically, it would likely earn them support more broadly in the Islamic country as they would be recognized as the only Islamic force waging a resistance fight against the occupying American forces.

B. The Leadership's Definition of "Success"

1. Arguments for Success Entailing a Specific Outcome:

- Detonating the device in the West
- Obtaining a critical threshold of global media coverage
- Effecting specific policy changes by threatening further attacks
- Increasing recruitment regionally
- Not being attacked by Islamic shaykhs on the religious legitimacy of the attack.

The tactical goal would be the simple execution of the device in the West. The strategic goal would be political in nature, which could include leveraging the threat of future detonations to remove American military presence from key areas in the Middle East, earn the release of certain high value prisoners, or force the Americans to fundamentally rethink its position on the Arab-Israeli peace process.

The political goal would be centered on changing American foreign policy in some arena. AQAP's leadership is likely to understand that it needs an actual attack before it can viably leverage policy changes through the threat of future attacks. The specific political goal really matters less than choosing one that will have resonance with the immediate base and broader fence-sitting community.

There might be room for negotiation, and in fact, that might be what AQAP would be angling for – creating some more international legitimacy through a position of strength.

2. Arguments for Success Allowing for a Suboptimal Outcome in Target and/or Timing:

- Detonating the device at all is better than not detonating it
- The killing of some Americans is better than the killing of no Americans
- The destruction of some infrastructure is better than the destruction of none
- At least the detonation, even if done in a suboptimal way, demonstrates that it *is* possible to conduct such an attack. This creates a benchmark that AQAP will be able to leverage for future threats.

The strategic goals are first reliant on tactical success. In that case, AQAP would dedicate whatever resources it had at its disposal to maximize the chance of tactical success.

If the leadership is concerned with simply getting a device into the United States and detonating it, regardless of timing or specific target, then a suboptimal detonation would be acceptable and still fall under the rubric of success. The detonation alone would achieve the bigger strategic goal.

AQAP is a master propaganda organization – it will be able to spin anything as a success. Therefore, the leadership would believe that it could leverage the power of its rhetoric to maximize even the sub-optimal outcome.

3. Arguments for Success Allowing for a Suboptimal Outcome Resulting in a "Fizzle" Yield:

A fizzle yield would be a far less desirable result than just a miss in timing or target. It would still, however, be spinnable by AQAP's propaganda arm as a strategic success.

A fizzle yield does not accomplish the kind of tactical success that AQAP needs in order to leverage the strategic success. Certainly, the media coverage would be there just given that AQAP was able to bring in a workable nuclear device into the United States. It would not, however, kill people nor would it damage infrastructure. For that reason, this would be a big disappointment to the AQAP leadership.

Political goals are contingent on tactical success. AQAP's ability to leverage pressure w/ the threat of future

attacks plummet if it is unable to execute the tactical part of the program.

Al-Qa'ida's global ideology is fundamentally about machismo and ego. A fizzle yield in the wake of multiple thwarted and failed plots would be the straw that could break the confidence of the global movement in AQAP's ability to execute.

4. Final Estimation:

A specific or suboptimal detonation would both be spun as a massive, even historic success. It would allow AQAP to then move to the political side of the equation, threatening future attacks using the credibility it would then have from such an attack. AQAP will also be able to draw on this success for internal recruitment and fundraising use for years to come. Final estimation: Suboptimal outcome with incorrect target and/or timing but not a fizzle.

5. How this factor might change in the next five years.

The reality is that in order to use threats to pressure the US on policy issues, AQAP needs a track record of proven ability to thwart American national security efforts and execute devastating and unprecedented attacks. If it is able to pull off other attacks over the next several years, then the importance of tactical success decreases. But if not, it will increase.

C. The Importance to the Leadership of Flexibility in the Field

1. Arguments for High Importance:

Once initiated, completing the attack takes precedence over all other concerns. Whatever it takes to inflict damage to the heart of the US, AQAP's leadership would authorize. So, although flexibility in the field is not, per se, important to the leadership, it might become so in the event that the leadership believed that this was necessary for the attack's success.

2. Arguments for Medium Importance:

Ensuring that the attack is executed is critical. That said, not making a strategic error in trying to complete the tactical side of the attack is just as important.

3. Arguments for Low Importance:

There is no evidence to suggest that the AQAP leadership attaches any particular importance to flexibility in the field.

4. Final Estimation:

Final estimation: Low importance.

5. How this factor might change in the next five years.

This is unlikely to change much in the next five years unless future attack attempts fail because of a lack of flexibility in the field, which would make this factor more important to the AQAP leadership.

D. The Leadership's Perception(s) of Previous Command and Control Outcomes

1. Previous Experience With Predetermined Command and Control:

There is little specific information about AQAP plots that has been released publicly. What is known suggests that AQAP seems to either pre-determine its command and control operations or grant total autonomy to its operatives after it releases them.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Failure:

The major regional/international AQAP attacks that involved deploying operatives includes:

- Attempted bombing by AQAP operative, Abdullah al-Asiri, of a Saudi Prince on August 27, 2009.
- Attempted midair bombing by AQAP operative, Omar Farouk Abdul Mutallab, of Northwest flight 253 bound for Detroit, MI on December 25, 2009.

- Thwarted second underwear bomb plot revealed on May 7, 2012.

None of these attacks ended up achieving their operational goals. The first failed because al-Asiri's explosion did not kill the intended target although the bomb was successfully detonated. The second failed in that the device did not detonate, although Abdulmutallab was able to defeat security with an explosive device. The third failed because the operative was actually working for Saudi intelligence and never intended to try to deploy the explosive device.

In each, the protocols were likely established by the leadership but the operational execution was left to the operative to determine within the pre-determined bounds.

In each of these cases, the leadership seems to have entrusted the operatives with the kind of autonomy they needed to bring the mission to fruition.

AQAP seems to be comfortable empowering its operatives with some free reign. This reflects a self-confident leadership that is willing to take risks. The question is how much of that operational culture has changed in the wake of a compromised plot.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in Success:

In the case of Abdulmutallab, he was able to penetrate security and get to the point of detonation. The only reason he failed was because of a faulty device. In that case, AQAP C&C succeeded (the failure was technical in terms of detonating the device), at least on several tactical and operational fronts.

In the case of Abdulmutallab, his attack was likely scripted by the leadership and required less need for flexible thinking.

Perhaps the key difference between Abdulmutallab and al-Asiri is the trust in the individual operative – al-Asiri was a trusted brother of the AQAP top bomb maker, while Abdulmutallab, on the other hand, seems like more of an operative of opportunity who likely needed to be limited more in the scope of his available options.

Arguments for Leadership Perceptions that Predetermined C&C Resulted in an Indeterminate Outcome:

The challenge for the AQAP leadership is identifying what variable led to the downfall of its operations. On the one hand, it might chalk the failed Abdulmutallab detonation off to bad luck rather than operator error or a failure to pre-determine the steps of the attack well enough. The leadership might view al-Asiri's attack in much the same way: bad luck. The infiltration of the second underwear bomb operative, however, is a failure of OPSEC and occurred because of a lack of control over its operative once he was equipped with the bomb. In that case, it seems clear that the leadership would want to exert more control over, or at least maintain better visibility over, its operatives in the immediate lead-up to the attack. The ability to identify the failure point variables might also cause the leadership to introduce some redundancy into its operations from here forward.

The unique combination of tactical successes and operational failures creates an odd dynamic – close but not quite seems to be the theme for AQAP and it is likely not one the group wants to continue.

2. Previous Experience with Assertive Command and Control:

Based on open source reporting, this is not the way that AQAP manages its operatives. It either highly structures the operation and releases the operative or it shapes broad outlines and then empowers the operatives to make decisions on the fly.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Failure:

None.

Arguments for Leadership Perceptions that Assertive C&C Resulted in Success:

None.

Arguments for Leadership Perceptions that Assertive C&C Resulted in an Indeterminate Outcome:

None.

3. Previous Experience with Delegative Command and Control:

Delegative seems like a very viable kind of C&C arrangement for AQAP's international operatives. In the case of al-Asiri, he had to pass through multiple screenings and checkpoints, as well as holding conversations with security professionals and talking a Prince into placing a telephone call back to his brother in Yemen in order to clue him into detonating the bomb.⁸⁶⁸

Arguments for Leadership Perceptions that Delegative C&C Resulted in Failure:

The AQAP leadership could approach the repeated close-but-not-quite results from its attacks from the negative perspective, viewing them as operational failures because none of them achieved their operational objectives, despite checking a number of tactical boxes. In that case the leadership may view the attack as a failure because:

- Operator error (Abdulmutallab was not able to detonate his explosive device, al-Asiri had not positioned his body correctly, AQAP's OPSEC/counter-intelligence personnel failed to pick up on the fact that they had been penetrated).
- God had determined the outcome as it happened.

This arrangement is the one that maximizes the level of uncertainty and risk for al-Qa'ida's leadership. It is probably not one that would be implemented as doctrine under Zawahiri, but is the kind of call that has been made from the affiliate, al-Qa'ida in the Arabian Peninsula's English-language media efforts, as well as individuals within the al-Qa'ida senior command, including Adam Gadahn.

Uncertainty is acceptable so long as you have reliable people working for you. In this case, if the leadership believes that the delegative model failed because it gave too much authority to the operatives, then it would likely reign back in the amount of flexibility that it gives operatives in the future.

Arguments for Leadership Perceptions that Delegative C&C Resulted in Success:

If AQAP's leadership was using a delegative model, which is difficult to determine with what information has been released in open source reporting, then it may view the fact that it had so many near misses as an indicator that it is doing something right and that there have only been minor things that have caused the leadership not to hit its strategic objectives. The fact that al-Asiri managed to detonate his bomb in the same room as a prince is a major success. He was also able to successfully detonate an explosive device on time and on target. The only thing he was not able to do was kill his target. So is the fact that Abdulmutallab was able to board a plane bound for the United States strapped with explosives.

In this case, AQAP's leadership seems to have given direction to al-Asiri but allowed him to navigate his way through the Saudi security system and conduct his attack when and how he believed was best. The leadership seemed to have a high tolerance for uncertainty and placed significant trust in its operative.

Terrorism is an inherently uncertain business. The AQAP leadership may recognize that fact and embrace it, thereby allowing its operatives to call audibles in the field.

The leadership's perspective on whether or not these are indicators of successes or failures is really a function of its attitudes and beliefs, which is impossible to know. Does it believe that it was incredibly lucky

⁸⁶⁸ Leonard Doyle, "New al-Qaeda 'Body Bombs' that Can Beat Airport Security are Alarming Terror Experts, BBC News, October 3, 2009. Available at: <http://www.telegraph.co.uk/news/uknews/terrorism-in-the-uk/6258137/New-al-Qaeda-body-bombs-that-can-beat-airport-security-are-alarming-terror-experts.html>

to have gotten as close as it did or incredibly unlucky to have been so close but unable to execute?

Arguments for Leadership Perceptions that Delegative C&C Resulted in an Indeterminate Outcome:

AQAP's leadership likely believes,

- AQAP's operatives have not had the ability to adequately demonstrate whether their training and preparation would be sufficient to make important operational-level decisions on the fly.
- The success or failure of their outcome would follow God's will, which is impossible to know. All they can do is put themselves in a position to execute what they deem the prudent course of action.

4. Leadership Perception of Outcomes Based on Command and Control Arrangement Type

Predetermined Final Estimation:

If AQAP's leadership had been employing a predetermined model, it is likely viewing its operations as tactical successes, operational failures and strategically indeterminate. It is executing some of the tactical requirements but not achieving its operational objectives but still spinning it in its propaganda as strategically having accomplished that which it sought to, just less so than it had hoped. Final estimate is indeterminate.

Assertive Final Estimation:

The assertive arrangement seems to fit AQAP's command culture less well. The leadership seems to be willing to release their operatives at the initiation of an attack plot. The open question is whether they have done so knowing that the operative will make the best decisions as he goes or if he has been prepared with a very clear set of directives about how to handle various situations. Final estimate is indeterminate.

Delegative Final Estimation:

The AQAP leadership likely believes that the delegative model could result in success if God wills it. This is not a trite point, however. They will continue to attempt to execute these kinds of attacks for political and reputational reasons but will likely attribute the success or failure to God, not their preparation or operational decision-making. Final estimate is indeterminate.

5. How this factor might change in the next five years.

If AQAP is unable to conduct a successful attack over the next several years, there is a high likelihood that the leadership will assert itself far more aggressively in ensuring that it executes one attack. Several near misses can be explained but if this trend continues, they will have to start demonstrating to their funders, their core supporters and to the global al-Qa'ida movement that they are capable of more than just near-misses.

As Ansar al-Shariah seizes more ground in Yemen, there is some likelihood that their recruiting pool will continue to expand. A bottomless source of potential suicide operatives is a useful resource for a terrorist group in that it allows them to take potential bigger risks and put less concern on the outcome of any single operation.

E. The Leadership's Perception: Complexity of Getting a Working Weapon to the Target (US)

1. Arguments for Perception of High Complexity:

If AQAP obtains/acquires/builds the device in the Middle East, shipping it to the US will be highly complicated and risky. It will have to rely on individuals who have fluency with the American system in order to get it to the US without being detected. Those are often the least trained and least well-known operatives and potentially viewed with suspicion by AQAP. The loss of Anwar al-Awlaki and Samir Khan in this regard is highly problematic for the organization. It is not known in the open source whether they have other native born Americans among their ranks or could access them through alliances and partnerships with groups such as Al-Shabaab.

If the device is acquired in the US, then AQAP would have to rely on a team abroad to acquire, deploy and

detonate, which still means that the leadership would have very little input, visibility or oversight into the attack.

To execute this attack, they would have to accept an extremely high tolerance for uncertainty and risk. The number of potential points of failure would be higher than nearly any operation al-Qa'ida or an affiliate have undertaken.

2. Arguments for Perception of Medium Complexity:

- There may be logistical challenges but it has previously done what others had not been able to do in terms of circumventing security measures.
- God is backing AQAP so even if it is difficult they believe they are destined for victory.
- As the most viable operational arm of al-Qa'ida, it probably has a bountiful number of recruits with diverse skills to draw upon.

In this case, it would have a cautiously optimistic outlook in thinking about uncertainty and risk. They would recognize the potential points of failure, take measures to alleviate them, and place their trust in the training of the operatives and the will of God.

The leadership's perception of the likelihood of getting the weapon to the target depends, in large part, on the leadership's psychological state – are they paranoid about security compromise? Are they anxious about potential points of failure? Or are they approaching the attack from a feeling of confidence and self-assuredness? The answer to their state of mind would shape the way that they think about the likelihood of getting their device to its intended target.

3. Arguments for Perception of Low Complexity:

None.

4. Final Estimation

Given the sheer magnitude of the potential destruction and the unprecedented nature of this attack, there is little reason to suspect that the AQAP leadership would view the attack as anything other than complex in nature. The leadership would likely dedicate the necessary resources and personnel to the operation. Final estimate is high complexity.

5. How this factor might change in the next five years.

The only way that AQAP leadership would no longer have a high or medium belief in the complexity of this operation was if it had an insider who had both access and ability to detonate a nuclear device already positioned in the US. Although this is a very slim chance, and growing increasingly slimmer after the death of their piper, Anwar al-Awlaki, who might have had the charisma and gravitas to lure someone like that into AQAP's vortex, the odds of that happening today are incredibly small.

F. Leadership's Perception of the Trustworthiness of Relevant Group Members

1. Arguments for Perception of High Trustworthiness:

- AQAP has safe havens,
- They maintain training camps
- Their internal esprit de corps seems to be high.
- The group seems to generally vet their operatives.
- Thanks to kinship and tribal networks, AQAP has been able to rely on personal relationships for local and regional recruits as well as for finding safe-havens.

Even with low uncertainty, the bonds of blood and shared experience can often convince leaders to ignore what they might know to be the prudent course.

It may believe that the most trusted operative, not always the most skilled, will be most reliable. In some

ways, this suggests that there could be lesser trained operatives conducting attacks, which lowers the overall likelihood of success but also lowers the likelihood of an operation being compromised or identified before it is initiated.

Its deployed operatives, other than the second underwear bomber, never betrayed the leadership and always sought to conduct their attack according to plan. The challenge, they would see, are the internal members who could compromise programs by sharing information before they are launched.

2. Arguments for Perception of Medium Trustworthiness:

- It has a dedicated cadre of operatives.
- It has been compromised by operatives.
- AQAP has a strong counter-intelligence program and is able to identify spies quickly.
- The U.S. has increased its focus on AQAP and is likely hatching multiple plots to penetrate them.

If the AQAP leadership believes that there might be other turned operatives currently within AQAP's ranks or believes that there are operatives providing information to government security services, they will have a decreased tolerance for uncertainty.

AQAP seems to prefer delegative or pre-determined command and control arrangements. If it were not for several unfortunate circumstances, in their perspective, these attacks would have worked.

3. Arguments for Perception of Low Trustworthiness:

The second underwear bomber debacle may have totally compromised the AQAP leadership's ability to trust all non-local operatives, both current and future. This lack of trust could end up alienating those already in and discouraging new operatives from joining or playing a meaningful part. Other spies that have been captured and killed internal to AQAP's structure should reinforce their concern that government intelligence and security services are able to turn their own personnel.

If the operatives are not as well trained or reliable as the AQAP leadership would like, it will be hesitant to release them to total autonomy.

4. Final Estimation:

In some way, it depends on how comfortable the leadership is with their operatives. It also depends on whether it has received additional reasons to think that its operatives have been compromised. If it has high anxiety about their reliability, the leadership will only empower them with low to medium levels of autonomy. If it has lower anxiety, then it will offer them higher amounts of flexibility. The AQAP leadership has been burned by a bad operative. For that reason, it may want to hold the reins a bit tighter in future operations to ensure that it doesn't happen again.

It probably has either a medium or low level of trustworthiness. There is no way that it could have allowed a turned operative into its operations, given him a next-generation explosive device, watched it be turned over to the Americans and not feel as if the group was totally compromised. Therefore, it would likely view operatives with either cautiousness to suspicion. Final estimate is medium-low level of trustworthiness.

5. How this factor might change in the next five years.

AQAP has historically seemed comfortable empowering its operatives with the flexibility they need in order to execute an attack. Beyond the recent situation with their second underwear bomber plot, AQAP is likely to err on the side of maximizing the flexibility of its operatives.

The biggest issue for AQAP is to identify just how badly it had been compromised. Was that operative sensitive to other plots being planned. Will it lead to the killing of other leaders or exposure of camps and safehouses? If there is a noticeable series of consequences, then AQAP's leadership will continue to feel that pressure, raise anxiety and paranoia.

G. The Leadership's Perception of the Reliability and Security of Communications

1. Arguments for Perception of High Reliability and Security:

AQAP has pioneered the use of encryption technology for communication and demonstrated time and again that it could use it for recruiting and coordinating operatives abroad. It would have a high sense of reliability and security based on past experience.

Its technical communications have allowed it to maintain visibility over individuals with whom it was corresponding in the West. This would reduce its concerns about the need for flexibility since it would be able to potentially play a more assertive role.

Although it does not seem to have used its encrypted communication for maintaining operational contact with field agents, in a longer term operation such as this, it may offer the leadership a chance to play a more assertive role.

2. Arguments for Perception of Medium Reliability and Security:

There could be concerns within the leadership that the US has cracked its encrypted form of communication. In that sense, the leadership would likely feel some ambivalence about using it. From there, it would have to rely on conventional means of communication, which are far less secure and this is therefore something that AQAP would likely avoid.

3. Arguments for Perception of Low Reliability and Security:

In the AQAP leadership's perception, their organization is being hunted like never before.⁸⁶⁹ Therefore, no forms of communication can be trusted. Operatives must be hand-picked, carefully vetted, meticulously instructed and released to conduct the attack without any follow-up communication.

It cannot run the risk of maintaining contact with field operatives at the cost of compromising the entire operation or, worse yet, the group itself.

4. Final Estimation:

The leadership either believes that its encryption communication is secure and will rely on this system as much as it needs to in order to ensure some level of connectivity or the leadership will not trust the system at all, fearing that it has been compromised – there is no middle ground here. Final estimate is high.

5. How this factor might change in the next five years.

There will likely be little change. It is a problem that is inherent to terrorist groups trying to conduct attacks against a nation who is hunting for them. The leadership needs to toe that fine line between maximizing security of its operations but also granting enough flexibility to its field operatives to execute the mission. It is a timeless problem.

H. The Leadership's Perception of Group Competency

1. Arguments for Perception of High Competency:

- Locally it has mastered the art of conducting terrorist attacks.
- Regionally it has had some limited tactical successes.
- Internationally, it has managed to run multiple operatives and conduct an unmanned international bombing campaign via the commercial package shipping system.

In short, this is a well-trained set of operatives, planners, facilitators and bomb makers that the leadership has working for them.

The odds are high that its master bomb tech, Ibrahim al-Asiri, has trained a small cadre of protégés in his

⁸⁶⁹ See, for example, "News Report," Sada al-Malahim, 12th issue. Al-Malahim Media. January 7, 2010.

advanced bomb making techniques. Its operatives seem to have received good training for navigating security protocols.

The need for a detonation would drive the leadership to carefully train, vet and prep the right operatives for this mission.

2. Arguments for Perception of Medium Competency:

The AQAP leadership would not entrust this assignment to anything other than its crack team. It would not pursue unless it felt that it had a highly competent team working for it. Anything short would run the risk of not just compromising the operation but potentially the entire organization.

3. Arguments for Perception of Low Competency:

None.

4. Final Estimation:

The group has demonstrated a high amount of competency. As the most feared al-Qa'ida affiliate, they have manpower, resources, skilled leadership, robust propaganda and a demonstrated track-record of terrorist attack plots. Final estimate is high.

5. How this factor might change in the next five years.

If the U.S. continues making a concerted effort to prioritize the elimination of AQAP's senior staff and safe havens, the quality of its leadership and operatives will necessarily deteriorate. In that case, AQAP would be hard-pressed to put together an operation of this magnitude on a skeleton crew. AQAP would not pursue something like this out of desperation but rather out of a position of strength, careful planning and focus.

I. Leadership's Perception of Existential Threat(s) to the Group

1. Arguments for Perception of High Existential Threat:

- AQAP and Yemen have become America's new focus in its war on al-Qa'ida. That means AQAP is becoming the new enemy number one.
- The Saudis seem to be assisting the Americans in trying to thwart attacks and penetrate AQAP's ranks. This means that AQAP is being challenged from all sides.
- Terrorist organizations always fail unless they can transform themselves into a viable governing force in Yemen, which they are trying to do at this point through Ansar al-Shariah it seems.

AQAP does believe that it is chosen by God to carry out its mission, so it likely believes that it will exist as long as God deems it necessary and useful.

AQAP has to have taken a very hard look at its security protocols in the aftermath of being infiltrated by a Saudi spy. The assessment really depends on the outcome of AQAP's internal assessment about how vulnerable it believes itself to be. Was that infiltration just a slip up? Or was it more endemic to its entire architecture? Has AQAP been compromised? These are all unknowns.

The leadership would probably assume that the US does NOT know that it has a nuclear device if it is able to actually acquire one.

AQAP's leadership would likely view the American response to its use of a nuclear device as overwhelming in force against its network in Yemen. There would be no doubt that the response would likely decimate AQAP's strength and safe havens in Yemen. Now, on the off chance that it detonated a bomb against Iran, there would also likely be a massive retaliation, not just against AQAP but against Yemen more broadly. That would likely provoke the Saudis to get involved which could lead to a regional conflagration.

Although AQAP's operations span much of southern Yemen now, its operational safe havens are likely limited to several key geographic areas. That said, American military power has the reach, if it had good

intelligence, to dismantle the organization through a series of missile strikes on key targets and locations.

Between tribes, local power brokers, peer competitors inside and outside Yemen, adversaries like the Huthis and others, AQAP has its hands full trying to win hearts and minds, staying alive and conducting attacks against adversaries.

2. Arguments for Perception of Medium Existential Threat:

There is really no reason that AQAP's leadership would view itself as having anything other than a high existential threat facing it. As a terrorist organization that is now trying to assert itself as the first al-Qa'ida affiliate among equals, it would have little doubt that its survival is constantly in question.

3. Arguments for Perception of Low Existential Threat:

None.

4. Final Estimation:

Final estimate is perception of high existential threat.

5. How this factor might change in the next five years.

There is not much flexibility here. Until AQAP's capability is virtually insignificant, the US will hunt down its leadership and top operatives. This means that AQAP is constantly going to be under existential threat until it is irrelevant as an organization. AQAP's leadership likely understands that and has to balance how hard to strike the US knowing that an overwhelming response would result against it – circa 2001 Afghanistan – which they are not ready to deal with at this point. The leadership believes that it is making progress on the ground and would not jeopardize that with a major nuclear attack, at least until it feels more secure that it could fend off/survive a massive US military response.

J. Leadership's Preference for "Failure"

1. Arguments for Preference for Fail Deadly:

- Detonation can still be spun through subsequent propaganda efforts using AQAP's media arm, Al-Malahim Media.
- There is no reason anyone needs to know that AQAP did not strike their intended target
- Only detonation allows it to convincingly wield the threat of further detonations as a political weapon against the US and other countries.

Non-detonation will also stymie AQAP's ability to fundraise. Funders are likely to seek out a record of operational success before they outlay significant resources.

Given AQAP's attempt to assert itself at the head of the al-Qa'ida movement, it needs its own version of 9/11. A failure to detonate its device would show that it is a second-rate copy of the first instantiation of al-Qa'ida in 2001.

2. Arguments for Preference for Fail Impotent:

The mission objectives can only be reached in detonation. An inert weapon offers AQAP no leverage and will be spun against it as being incompetent (by its adversaries) and a symbol of another wasted opportunity (from within its own movement).

Failure would be a morale blow to AQAP's base, raising questions in the eyes of the fence-sitters about AQAP's commitment, capability and competence. This could impact regional and global recruitment efforts and even potential future alliances with other groups and affiliates.

Donors would probably view an inert weapon as a decision by God, not a direct reflection on AQAP's tactical skillset. It could lead to a spike in donor funding. On the other hand, if donors did view an inert device as reflective of AQAP's lack of substantive expertise, then it could potentially collapse their private

funding channels.

3. Final Estimation:

The leadership needs a detonation in order to check the boxes internally and externally. If it cannot get a detonation, it would probably not even attempt to conduct the attack. Timing and location matter far less than the sheer act of detonating the device. Detonation would provide AQAP at least a decade of political currency with which to trade against its adversaries and with its supporters. Final estimate is fail deadly.

4. How this factor might change in the next five years.

Only if the AQAP organization found itself in a stronger, more stable and secure position, where it was flush with cash, safe havens, redundancy in terms of operatives and nuclear devices, would it embark on an attack where there was a probability that it would not be able to detonate the device. At this point, it could not afford another major failed plot, despite its ability to use propaganda as a proxy for real-world attacks. AQAP's focus seems to be on the local level, winning hearts and minds and seizing control of territory and institutions. Employing a nuclear device does not directly support these missions so something would have to change on AQAP's homefront for them to prioritize the major investment in this area. That could be as little as interest from AQAP's leadership in conducting such an attack, pressure from an external donor, a request from another al-Qa'ida affiliate or a loss of key partnerships.

III. Conclusion

Overall, based on all current knowledge of the group what type of nuclear C&C do you think the group would employ and why?

AQAP would have to plan, vet and prepare for this attack in a meticulous fashion. The challenge for AQAP is that it is currently under massive counterterrorism pressure making time and breathing space hard to find. It would then need to deploy the device, either from the Middle East which would be extraordinarily complicated – or find an insider in the U.S. or another Western country, which is similarly difficult. The AQAP leadership will be torn between trying to micromanage in order to ensure that the plot works and trusting its operatives as it has in the past with the autonomy it needs to conduct the attack. More than likely, AQAP would try to pre-determine as many potential scenarios with the operatives and then deploy them, allowing them to make decisions within carefully pre-scripted sets of boundaries. Communication would be limited if at all – or would rely on encryption software and proxies in order to make contact with the cell deploying the weapon. The cell would likely be told that it would be better to detonate it anywhere anytime than not at all. Any failure to detonate and have the inert weapon fall into the hands of U.S. intelligence would be a cataclysm for them operationally and in terms of public perception of its capability. Final estimate is: Predetermined/Delegative.

Appendix 7: VNSA Nuclear Command and Control Profile Guidelines

Overview

The profile has three sections. The first—*pre-analysis*—briefly explores the group's background, key decision maker(s), ideology, constituents, skill sets and perceived existential threats. The profile's second section—*Factor Analysis*—examines *ten discrete factors* relating to the group leadership's tolerances along with various perceptions, priorities and preferences. Finally, after exploring these ten factors, the final section is your brief analysis of the group's likely nuclear C&C.

Parameters

- The ten factors (and other relevant aspects of the profile) are all in the context of a nuclear weapon. This reality will be made clear as you move through these guidelines and compile the profile.
 - The C&C is over a *single* nuclear weapon, not an arsenal of two or more.
 - Unless otherwise noted, the group and the overall relevant security milieu should be considered in today's context (i.e., mid-2011).
 - When examining each factor, be very specific (i.e., explicitly identify) if your discrete observations are evidence *or* opinion. The former must be backed up by footnotes; the latter can, of course, be backed up by evidence (and footnotes).
-

I. Pre-analysis (this section should be ~10-12 pages)

A. General Background of the Group (1/2 page)

Where founded; by whom; when; what are the main things they have done since then, etc.

B. Identification and Brief Exploration of the Group's Key Decision Maker(s) (~1 page)

In your vignette of key decision maker(s) consider the following:

- What is their general personality?
- What are their salient characteristics (technical skills, education, paranoia, theologian, battle-hardened, etc.)?
- What is their general decision-making style (autocratic, consensual, etc.)?
- How do they generally maintain control of group members?
- What sort of risk tolerance have they previously demonstrated?
- Any other features you consider important.

C. Ideology

Briefly summarize the group's ideology.

1. Discuss how the elements directly below relate to the group's ideology and, if applicable, vice versa. In other words, how does the groups ideology *fit together* with the following elements:
 - a. The leadership's perception of a religious or quasi-religious justification(s) for the employment of a nuclear weapon(s).
 - b. The leadership's (tactical attack) goals, vis-à-vis their group's violent actions, whether these are focused more on causing terror, destruction or both.
 - c. The leadership's political goals.
 - d. Any other related aspects of the group's ideology and the elements highlighted above that you think have significance.

D. Constituents

1. Address the leadership's perceptions of the group's links to constituencies.
 - a. What are the perceived relevant qualities of these constituencies? For example:
 - i. Who are the main perceived constituencies?
 - ii. How important are these to the group (e.g., is widespread constituency support vital to their ideology, or more peripheral? Or do they absolutely depend on constituency support for recruits / materiel, or are there other sources for this?)
 - iii. How much constituency support does the group perceive itself to have? (Only a limited proportion of its constituency; a sizeable part of its constituency; most of its perceived constituency group)?
 - iv. Is the group happy with its relationship to its perceived constituents? Does it desire more support?
 - b. How loyal does the group perceive its constituents to be? E.g., is the group very nervous about doing anything the constituency doesn't like, or does it feel secure that its constituents will support it under most circumstances?
2. Describe the group's financial backing.

- a. Does the leadership perceive that this financial backing would be altered in some significant manner (positively or negatively) if the group employed a nuclear weapon?
 1. Does the leadership perceive that its financial backers would alter their support significantly (positively or negatively) based on the group's specific target for nuclear attack?
 - a. What does the group perceive the consequences to be with its financial backers if the nuclear weapon detonates prematurely (e.g., while transporting it through friendly territory)?
3. Describe the group's link to state sponsor(s).
 - a. Similar to above (i.e., D. 2: "Describe the group's financial backing"), address how the group's leadership perceives alterations in their relationship to *state* backers arising from the targeting and detonation of a nuclear device(s). (Keep in mind that the weapon doesn't have to successfully detonate to possibly have an impact on the group's state sponsors. Consider the effects of a fizzle or a fizzle resulting in a large release of radioisotopes [i.e., an unintended huge "dirty-bomb"]).

E. Specialists in the Group

What is the leadership's perception of the levels of training and knowledge of the group's specialists? (Reminder: like most other elements of this profile your analysis should be in the context of nuclear weapons.)

F. Existential Challenges to the Group

Does the group's leadership think it likely that their enemies will obtain knowledge of the group's possession of a nuclear weapon(s) (i.e., knowledge of *pre-employment* custody)?

- a. If YES (i.e., perception that enemy will have knowledge of possession), state this and address the following:
 1. What are the likely assumptions that the leadership has vis-à-vis enemy responses to the knowledge that they have acquired a weapon?
 2. What is the leadership's general assessment of the group's vulnerabilities to preemptive attack?
 3. Does the leadership perceive that the group offers its enemies viable attack targets?
- b. If NO (i.e., perception that the enemy will NOT have knowledge of pre-employment possession – knowledge of the group's possession will only come about *after* the weapon is employed), state this and address the following:
 4. What are the likely assumptions that the leadership has vis-à-vis enemy responses to the weapon's employment?
 5. What is the leadership's general assessment of the group's vulnerabilities?
 6. Does the leadership perceive that the group offers its enemies viable retaliation targets?

II. Factor Analysis

(Analysis of each of the ten factors below should be ~ 1-2 pages. This should be viewed in the context of the employment of a nuclear weapon and will in many cases draw on the pre-analysis completed above.)

A. The Leadership's Tolerance for Uncertainty

1. High Tolerance (roughly equates to a greater willingness to take risks) List all of the arguments for a high tolerance for uncertainty on the part of the group's leader(s) in the context of a nuclear weapon.

- a. Consider how the following variables may increase the tolerance to a high level:
 - i. General ideological elements.
 - ii. Perception of religious justification for use.
 - iii. Political goals.
 - iv. Whether the tactical/strategic goal for use of the weapon is terror and/or destruction.
 - v. Leadership's perceptions of the group's links to constituencies.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (a) Perception of reliability and security within the group.
 - (b) Degree to which leadership acts in a rational manner.
- c. Identify and explore other variables not yet identified that you believe make it likely the tolerance for uncertainty is high.

2. Medium Tolerance List all of the arguments for a medium tolerance for uncertainty.

- a. Consider how the following variables may make the tolerance for uncertainty medium:
 - i. General ideological elements.
 - ii. Perception of religious justification for use.
 - iii. Political goals.
 - iv. Whether the tactical/strategic goals for use of the weapon is terror and /or destruction.
 - v. Leadership's perceptions of the group's links to constituencies.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (a) Perception of reliability and security within the group.
 - (b) Degree to which leadership acts in a rational manner.
- c. Identify and explore other variables not yet identified that you believe make it likely the tolerance for uncertainty is medium.

3. Low Tolerance List all of the arguments for a low tolerance for uncertainty.

- a. Consider how the following variables may decrease the tolerance for uncertainty to a low level:
 - i. General ideological elements.
 - ii. Perception of religious justification for use.
 - iii. Political goals.
 - iv. Whether the tactical/strategic goals for use of the weapon is terror and /or destruction.
 - v. Leadership's perceptions of the group's links to constituencies.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:

- (c) Perception of reliability and security within the group.
 - (d) Degree to which leadership acts in a rational manner.
 - c. Identify and explore other variables not yet identified that you believe make it likely the tolerance for uncertainty is low.
 - 2. Having now investigated the evidence for a high, medium and low tolerance for uncertainty, identify which level of tolerance for uncertainty among the leadership is most likely and explain why.
 - 3. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
 - a. If your answer is “NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors,” do nothing more for this specific question.
 - b. If your answer “YES”:
 - ii. Identify what it is about the factor that makes it relatively more or less important.
 - iii. Identify how much more or less salient to the leadership this factor is than other factors.
 - 4. Consider how this factor—the leadership’s tolerance for uncertainty—might change in the next five (5) years. Briefly explore (~½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
-

B. The Leadership’s Definition of “Success”

1. Specific Outcome List all of the arguments for a definition of success that requires a *specific, predetermined outcome* (in terms of when, where and how a nuclear weapon is employed) in order for the mission to be perceived as a success.

- a. Consider how the following variables may contribute to a leadership’s definition of success being limited to a specific outcome:
 - i. Whether the tactical/strategic goals for use of the weapon is terror and /or destruction.
 - ii. Political goals.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (a) The possibility of the group’s leadership being open to negotiations during nuclear exchange(s).
- c. Identify and explore other variables not yet identified that you believe make it likely the leadership’s definition of success is limited to a *specific outcome*.

2. Suboptimal Outcome: Target and/or Timing List all of the arguments for a definition of success that allows for a *suboptimal outcome*; specifically that the destruction of an incorrect target and/or an incorrect timing of attack is acceptable to the leadership.

- a. Consider how the following variables may allow for a leadership’s definition of success to include a suboptimal outcome (target and/or timing):

- i. Whether the tactical/strategic goals for use of the weapon is terror and /or destruction.
- ii. Political goals.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (a) The possibility of the group's leadership being open to negotiations during nuclear exchange(s).
- c. Identify and explore other variables not yet identified that you believe make it likely the leadership's preference for success allows for a suboptimal outcome (target and/or timing).

3. Suboptimal Outcome: "Fizzle" Yield List all of the arguments for a definition of success that includes a *suboptimal outcome*; specifically a detonation of the nuclear weapon resulting in a fizzle yield (note that such an event, for our purposes, does **not** result in the release of significant quantities of radioisotopes; i.e., the "dud" does not result in a "dirty bomb" type release; this category also implies that the group would settle for incorrect target/timing in addition to settling for a fizzle).

- a. Consider how the following variables may allow for a leadership's preference for success to include a suboptimal outcome (fizzle yield):
 - i. Whether the tactical/strategic goals for use of the weapon is terror and /or destruction.
 - ii. Political goals.
 - b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (a) The possibility of the group's leadership being open to negotiations during nuclear exchange(s).
 - c. Identify and explore other variables not yet identified that you believe make it likely the leadership's preference for success allows for a suboptimal outcome (fizzle yield).
1. Having now investigated the evidence, identify which one of the three—i.e., 1) a specific outcome, 2) a suboptimal outcome (with incorrect target and/or timing but not a fizzle), or 3) a suboptimal outcome (with a fizzle yield and/or incorrect target/timing)—is the most likely outcome that the leadership would regard as a "success" and explain why.
2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
- a. If your answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
 - b. If your answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much more or less salient to the leadership this factor is.
3. Consider how this factor—the leadership's preference for success—might change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent

variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.

C. The Importance to the Leadership of Flexibility in the Field

1. High List all of the arguments you can identify for flexibility in the field being of high importance to leadership.

2. Medium List all of the arguments you can identify for flexibility in the field being of medium importance to leadership.

3. Low List all of the arguments you can identify for flexibility in the field being of low importance to leadership.

4. Having now investigated the evidence for flexibility in the field being of either high, medium or low importance to the leadership, identify which one of the three preference levels is most likely and explain why.

5. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?

- a. If your answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
- b. If your answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much more or less salient to the leadership this factor is.

6. Consider how this factor—the importance to the leadership of flexibility in the field—might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.

D. Leadership's Perception(s) of the Outcomes of Previous Command and Control Arrangements

1. If the Group has Engaged in—or is aware of— Major (Non-nuclear) Actions Previously Where the C&C Arrangements of the Group were Pre-determined, Answer the Questions in this Section

NOTE: "Pre-determined" is defined as *preassigned* protocols and instructions given to group personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon). Pre-determined in this context means that group personnel responsible for transport, operational security and detonation of the weapon must strictly adhere to prearranged operational behavior *regardless* of events that transpire in the field (although, obviously, pre-planned behavior can anticipate certain events and allow for pre-planned actions in response).

In short, in this “pre-determined” environment, personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon) are acting as pre-programmed (nuclear-armed) automatons. None of their actions, insofar as they have control over them, should run counter to the leadership’s pre-conceived plan of how events can and should play out.

- a. FAILURE: List all of the arguments for the leadership having the perception that *pre-determined* previous command and control arrangements have resulted in failure.
 - i. Consider how the value you gave to the following variable may influence the perception that *pre-determined* command and control arrangement led to mission failure:
 - (a) The leadership’s tolerance for uncertainty
 - ii. Explore and identify other variables that you believe make it likely the leadership perceives that previous *pre-determined* command and control arrangements have resulted in failure.
- b. SUCCESS: List all of the arguments for the leadership having the perception that *pre-determined* previous command and control arrangements have resulted in success.
 - i. Consider how the value you gave to the following variable may influence the perception that *pre-determined* command and control arrangement led to mission success:
 - (a) The leadership’s tolerance for uncertainty
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *pre-determined* command and control arrangements have resulted in success.
- c. INDETERMINATE: List all of the arguments for the leadership having the perception that previous *pre-determined* command and control arrangements had an *indeterminate* effect.
 - i. Consider how the value you gave to the following variable may influence the perception that *pre-determined* command and control arrangement led to mission success:
 - (a) The leadership’s tolerance for uncertainty
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *pre-determined* command and control arrangements had an *indeterminate* effect.

2. If the Group has Engaged in—or is aware of—Major (Non-nuclear) Actions Previously Where the C&C Arrangements of the Group were Assertive, Answer the Questions in this Section.⁸⁷⁰

NOTE: “Assertive” is defined as a command system in which the leadership maintains control (either in person or, more likely, through obedient subordinates in contact with the leadership from the field) over relevant aspects of the operation (e.g., in the context of nuclear weapons, in the weapon’s transportation and detonation). While preplanning may have occurred, alterations in the strategic environment allow for the leadership to make changes “on the fly.” For example, missions can be called off altogether or adjustments can be made in targeting; however, all such modifications can only be initiated by the leadership. Moreover, “assertive” arrangements can require that in-the-

⁸⁷⁰ This section can be completed even if the previous one has been completed, for instance in cases where a group has utilized both Pre-determined and Assertive C&C arrangements in previous attacks.

field subordinates must contact leadership at every step of the mission to receive further instructions (e.g., they may not even know that they are transporting a nuclear weapon and what the target is prior to some point within the mission itself; by the way, apart from the plane's pilot, this was the case for the *Enola Gay's* Hiroshima mission).

- a. FAILURE: List all of the arguments for the leadership having the perception that *assertive* command and control arrangements have resulted in failure.
 - i. Consider how the value you gave to the following variable may influence the perception that previous *assertive* command and control arrangement led to failure:
 - (a) The leadership's tolerance for uncertainty
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *assertive* command and control arrangements have resulted in failure.
- b. SUCCESS: List all of the arguments for the leadership having the perception that previous *assertive* command and control arrangements have resulted in success.
 - i. Consider how the value you gave to the following variable may influence the perception that previous *assertive* command and control arrangement led to success:
 - (a) The leadership's tolerance for uncertainty.
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *assertive* command and control arrangements have resulted in success.
- d. INDETERMINATE: List all of the arguments for the leadership having the perception that previous *assertive* command and control arrangements had an *indeterminate* effect.
 - i. Consider how the value you gave to the following variable may influence the perception that *assertive* command and control arrangement had an indeterminate effect:
 - (a) The leadership's tolerance for uncertainty.
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *assertive* command and control arrangements had an indeterminate effect.

3. If the Group has Engaged—or is aware of— Major (Non-nuclear) Actions Previously Where the C&C Arrangements of the Group were Delegative, Answer the Questions in this Section:⁸⁷¹

NOTE: "Delegative" is defined as a system in which the leadership has empowered subordinates to make key decisions if necessary in the conduct of the operation (in the nuclear context, this would refer mainly to the weapon's transport, targeting and detonation). In this case, the leadership may maintain *assertive* control over the weapon with authorization (e.g., devolution) of command given to subordinates in the event of certain predefined occurrences (for example, if deputies in the field lose communication with the leadership). Moving farther along the spectrum of delegation, leaders may simply allow deputies to act as they see fit in the field as the mission progresses (e.g., the football term of "make an audible" – when a quarterback makes a change of play at the line of scrimmage based on what the defense is showing).

⁸⁷¹ This section can be completed even if the previous one (or two) has been completed, for instance in cases where a group has utilized Pre-determined and/or *Assertive* C&C and delegative arrangements in previous attacks.

In short, when compared to the other two types of arrangements considered in the profile (i.e., “pre-determined” and “assertive”) “delegative” arrangements give subordinates the greatest flexibility in the field.

- a. FAILURE. List all of the arguments for the leadership having the perception that *delegative* command and control arrangements have resulted in failure.
 - i. Consider how the value you gave to the following variable may influence the perception that previous *delegative* command and control arrangement led to failure:
 - (a) The leadership’s tolerance for uncertainty.
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *delegative* command and control arrangements have resulted in failure.
 - b. SUCCESS. List all of the arguments for the leadership having the perception that previous *delegative* command and control arrangements have resulted in success.
 - i. Consider how the value you gave to the following variable may influence the perception that previous *delegative* command and control arrangements led to success:
 - (a) The leadership’s tolerance for uncertainty.
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *delegative* command and control arrangements have resulted in success.
 - a. INDETERMINATE: List all of the arguments for the leadership having the perception that previous *delegative* command and control arrangements had an indeterminate effect.
 - i. Consider the value you gave to the following variable:
 - (a) The leadership’s tolerance for uncertainty.
 - ii. Identify and explore other variables that you believe make it likely the leadership perceives that previous *delegative* command and control arrangements had an indeterminate effect.
2. Having now investigated the evidence above, answer the following:
- i. Based on their past experience, does the leadership perceive that pre-determined command and control arrangements will result in: 1) *success* or, 2) *failure* or, 3) does the leadership perceive that the effects of predetermined command and control arrangements are *indeterminate*? Explain why you make that decision.
 - ii. Does the leadership perceive that assertive command and control arrangements will result in: 1) *success* or, 2) *failure* or, 3) do they perceive that the effects of assertive command and control arrangements are *indeterminate*? Explain why you make that decision.
 - iii. Does the leadership perceive that delegative command and control arrangements will result in: 1) *success* or, 2) *failure* or, 3) do they perceive that the effects of delegative command and control arrangements are *indeterminate*? Explain why you made that decision.

3. Answer the following: “Is there something particular to the group that makes this factor—leadership perception of previous command and control arrangements—more or less important relative to all of the other nine factors?”
 - i. If your answer is “NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors,” do nothing more for this specific question.
 - ii. If your answer “YES”:
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much or less salient to the leadership this factor is.
 4. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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E. Leadership Perception: Complexity of Getting a Working Weapon to the Target (US)

1. High Complexity List all of the arguments for the leadership having the perception that getting a working weapon to the target will involve a high level of complexity.

- a. Consider the value you gave to the following variables:
 - i. Leadership’s tolerance for uncertainty.
 - ii. Leadership’s definition of success (i.e., does the leadership prefer a specific outcome or can “success” include the wrong timing and/or target. Finally, if the weapon “fizzles,” could the leadership still define the action as a success).
 - iii. Leadership perception of the outcome of previous C&C arrangements.
- b. Identify and explore other variables that you believe make it likely the perception of getting a weapon to the target is high.

2. Medium Complexity List all of the arguments for the leadership having the perception that getting a working weapon to the target will involve a medium level of complexity.

- a. Consider the value you gave to the following variables:
 - i. Leadership’s tolerance for uncertainty.
 - ii. Leadership’s definition of success (i.e., does the leadership prefer a specific outcome or can “success” include the wrong timing and/or target. Finally, if the weapon “fizzles,” could the leadership still define the action as a success).
 - iii. Leadership perception of the outcome of previous C&C arrangements.
- b. Identify and explore other variables that you believe make it likely the perception of getting a weapon to the target is medium.

3. Low Complexity List all of the arguments for the leadership having the perception that getting a working weapon to the target will involve a low level of complexity.

- a. Consider the value you gave to the following variables:
 - i. Leadership’s tolerance for uncertainty.
 - ii. Leadership’s definition of success (i.e., does the leadership prefer a specific outcome or can “success” include the wrong timing and/or target.

Finally, if the weapon “fizzles,” could the leadership still define the action as a success).

- iii. Leadership perception of the outcome of previous C&C arrangements.
 - b. Identify and explore other variables that you believe make it likely the perception of getting a weapon to the target is low.
1. Having now investigated the evidence for a high, medium and low perceived complexity of getting a working weapon to the target, identify which one of these three leadership perceptions is most likely and explain why.
 2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
 - a. If you answer is “NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors,” do nothing more for this specific question.
 - b. If you answer “YES”:
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much more or less salient to the leadership this factor is.
 3. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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F. Leadership Perception of the Trustworthiness of Relevant Group Members

(Reminder: like most other elements of this profile your analysis should be in the context of nuclear weapons.)

1. High Trustworthiness List all of the arguments for the leadership having the perception of high trustworthiness of relevant group members.

- a. Consider the value you gave to the following variables:
 - i. The leadership’s tolerance for uncertainty.
 - ii. The leadership’s definition of success (see above).
 - iii. Leadership perception of the outcome of previous C&C arrangements.
- b. Identify and explore other variables that you believe make perceptions of trustworthiness high.

2. Medium Trustworthiness List all of the arguments for the leadership having the perception of medium trustworthiness of relevant group members.

- a. Consider the value you gave to the following variables:
 - i. The leadership’s tolerance for uncertainty.
 - ii. The leadership’s definition of success (see above).
 - iii. Leadership perception of the outcome of previous C&C arrangements
- b. Identify and explore other variables that you believe make perceptions of trustworthiness medium.

3. Low Trustworthiness List all of the arguments for the leadership having the perception of low trustworthiness of relevant group members.

- a. Consider the value you gave to the following variables:

- i. The leadership's tolerance for uncertainty.
 - ii. The leadership's definition of success (see above).
 - iii. Leadership perception of the outcome of previous C&C arrangements.
 - b. Identify and explore other variables that you believe make perceptions of trustworthiness high.
 1. Having now investigated the evidence for the leadership perceiving a high, medium and low level of trustworthiness of the relevant personnel, identify which one of these three leadership perceptions is most likely and explain why.
 2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
 - a. If you answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
 - b. If you answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much or less salient to the leadership this factor is.
 3. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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G. Leadership Perception of the Reliability and Security of Communications

NOTE: this relates only to reliability and security vis-à-vis the *technical* aspects of communication (e.g., it does not include the reliability of *personnel* to follow correct operational procedures and/or any other human behavioral elements).

1. High Reliability and Security List all of the arguments for the leadership having the perception of a high level of reliability and security of communications.

- a. Consider the value you gave to the following variables:
 - i. The leadership's tolerance for uncertainty.
 - ii. Importance to the leadership of flexibility in the field.
 - iii. The leadership's perception of the outcome of previous C&C arrangements.
 - iv. The leadership's perception of the complexity of getting a working weapon to the target.
- b. Identify and explore other variables that you believe make it likely the leadership perceives that there is a high reliability and security of communications.

2. Medium Reliability and Security List all of the arguments for the leadership having the perception of a medium level of reliability and security of communications.

- a. Consider the value you gave to the following variables:
 - i. The leadership's tolerance for uncertainty.
 - ii. Importance to the leadership of flexibility in the field.
 - iii. The leadership's perception of the outcome of previous C&C arrangements.
 - iv. The leadership's perception of the complexity of getting a working weapon to the target.

- b. Identify and explore other variables that you believe make it likely the leadership perceives that there is a medium reliability and security of communications.

3. Low Reliability and Security List all of the arguments for the leadership having the perception of a low level of reliability and security of communications.

- a. Consider the value you gave to the following variables:
 - i. The leadership's tolerance for uncertainty.
 - ii. Importance to the leadership of flexibility in the field.
 - iii. The leadership's perception of the outcome of previous C&C arrangements.
 - iv. The leadership's perception of the complexity of getting a working weapon to the target.
 - b. Identify and explore other variables that you believe make it likely the leadership perceives that there is a low reliability and security of communications.
1. Having now investigated the evidence for the leadership perceiving a high, medium and low level of reliability and security of communications, identify which of these leadership perceptions is most likely and explain why.
2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
- a. If you answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
 - b. If you answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much or less salient to the leadership this factor is.
3. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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H. Leadership Perception of Group Competency

(Reminder: like most other elements of this profile your analysis should be in the context of nuclear weapons.)

1. High Competency List all of the arguments for the leadership having the perception of high group competency.

- a. Consider the value you gave to the following variables:
 - i. Training and knowledge of the group's specialists.
 - ii. The leadership's tolerance for uncertainty.
 - iii. The leadership's definition of success (see above).
- b. Identify and explore other variables that you believe make it likely the leadership perceives the group as possessing a high level of competency.

2. Medium Competency List all of the arguments for the leader's perception of medium group competency.

- a. Consider the value you gave to the following variables:

- i. Training and knowledge of the group's specialists.
- ii. The leadership's tolerance for uncertainty.
- iii. The leadership's definition of success (see above).
- b. Identify and explore other variables that you believe make it likely the leadership perceives the group as possessing a medium level of competency.

3. Low Competency List all of the arguments for the leader's perception of low group competency.

- a. Consider the value you gave to the following variables:
 - i. Training and knowledge of the group's specialists.
 - ii. The leadership's tolerance for uncertainty.
 - iii. The leadership's definition of success (see above).
 - b. Identify and explore other variables that you believe make it likely the leadership perceives the group as possessing a low level of competency.
1. Having now investigated the evidence for the leadership having the perception of a high, medium and low level of group competency, identify which one of these leadership perceptions is most likely and explain why.
2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
- a. If you answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
 - b. If you answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much or less salient to the leadership this factor is.
3. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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I. Leadership Perception of Existential Threat(s) to the Group

1. High Existential Threat List all of the arguments for the leadership having the perception that the group faces a high existential threat.

- a. Consider the value you gave to the following variables:
 - i. The group's ideology.
 - ii. The group's assessments of their own vulnerabilities.
 - iii. The leadership's perception that enemy has knowledge of group's possession of a nuclear weapon(s).
 - iv. The leadership's assumptions about state responses to nuclear weapon(s) use.
 - v. The leadership's perception that enemy will conclude group possesses viable retaliation targets (post nuclear event).
 - a. Make sure to address whether or not the leadership perceives that they group actually possesses viable retaliation targets regardless of the enemies perception of viability.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:

- (a) The group's links to state sponsors.
 - (b) The group's financial backers.
 - (c) Existence and location of the group's safe haven(s).
 - (d) Number of and perceived quality of the group's competitors.
- c. Identify and explore other variables that you believe make it likely the leadership perceives a high existential threat.

2. Medium Existential Threat List all of the arguments for the leadership having the perception that the group faces a medium existential threat.

- a. Consider the value you gave to the following variables:
 - i. The group's ideology.
 - ii. The group's assessments of their own vulnerabilities.
 - iii. The leadership's perception that enemy has knowledge of group's possession of nuclear weapon(s).
 - iv. The leadership's assumptions about state responses to nuclear weapon use.
 - v. The leadership's perception that enemy will conclude group possesses viable retaliation targets (post nuclear event).
 - (a) Make sure to address whether or not the leadership perceives that the group actually possesses viable retaliation targets regardless of the enemy's perception of viability.
- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (a) The group's links to state sponsors.
 - (b) The group's financial backers.
 - (c) Existence and location of the group's safe haven(s).
 - (d) Number of and perceived quality of the group's competitors.
- c. Identify and explore other variables that you believe make it likely the leadership perceives a medium existential threat.

3. Low Existential Threat List all of the arguments for the leadership's perception that the group faces a low existential threat.

- a. Consider the value you gave to the following variables:
 - i. The group's ideology.
 - ii. The group's assessments of their own vulnerabilities.
 - iii. The leadership's perception that enemy has knowledge of group's possession of nuclear weapons.
 - iv. The leadership's assumptions about state responses to nuclear weapon use.
 - v. The leadership's perception that enemy will conclude group possesses viable retaliation targets (post nuclear event).
 - (a) Make sure to address whether or not the leadership perceives that the group actually possesses viable retaliation targets regardless of the enemy's perception of viability.

- b. Consider and, if appropriate, explore other variables that potentially feed into the factor.
 - i. For example:
 - (b) The group's links to state sponsors.
 - (c) The group's financial backers.
 - (d) Existence and location of the group's safe haven(s).
 - (e) Number of and perceived quality of the group's competitors.
 - c. Identify and explore other variables that you believe make it likely the leadership perceives a low existential threat.
 - 1. Having now investigated the evidence for the leadership's perception of a high, medium and low existential threat, identify which of these is the most likely leadership perception and explain why.
 - 2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
 - a. If you answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
 - b. If you answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much or less salient to the leadership this factor is.
 - 3. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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J. Leadership Preference for Type of "Failure"

1. Fail Deadly List all of the arguments for the leadership preferring that, in the event of mishap, mission failure still results in the detonation of the weapon, regardless of its location or any other considerations.

- a. Consider the following variables:
 - i. The group's ideology.
 - ii. The leadership's perceptions of the group's links to constituencies.
 - iii. The group's financial backing / financial backers.
 - iv. The group's link to state sponsor(s).
- b. Identify and explore other variables that you believe make it likely leadership's prefers to "fail deadly."

2. Fail Impotent List all of the arguments for the leadership preferring that, in the event of mishap, mission failure results in an inert weapon; regardless of what occurs, if the mission's objectives are not reached the weapon will not detonate.

- a. Consider the following variables:
 - i. The group's ideology.
 - ii. The leadership's perceptions of the group's links to constituencies.
 - iii. The group's financial backing / financial backers.
 - iv. The group's link to state sponsor(s).

- b. Identify and explore other variables that you believe make it likely leadership's prefers to "fail impotent."
 - 1. Having now investigated the evidence for the leadership's preference for fail deadly and fail impotent, identify which one of these two options is the most likely leadership preference and explain why.
 - 2. Answer the following: Is there something particular to the group that makes this factor more or less important relative to all of the other nine factors?
 - a. If you answer is "NO, there is no evidence to support treating this factor as more or less important as all of the other nine factors," do nothing more for this specific question.
 - b. If you answer "YES":
 - i. Identify what it is about the factor that makes it relatively more or less important.
 - ii. Identify how much or less salient to the leadership this factor is.
 - 3. Consider how this factor might likely change in the next five (5) years. Briefly explore (~ ½ page) what change in an independent variable(s), in your opinion, would be necessary to precipitate a different answer to question #4 directly above.
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III. Conclusion (~1 page or less)

Based on any and all knowledge you have of the group (including, of course, insight from the compilation of this profile), what type of nuclear C&C do you think the group would employ and why? (I.e., is it: Pre-determined, Assertive, or Delegative.)

Recall:

- A. **"Pre-determined"** is defined as *preassigned* protocols and instructions given to group personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon). Pre-determined in this context means that group personnel responsible for transport, operational security and detonation of the weapon must strictly adhere to prearranged operational behavior *regardless* of events that transpire in the field (although, obviously, pre-planned behavior can anticipate certain events and allow for pre-planned actions in response).

In short, in this "pre-determined" environment, personnel responsible for the operational conduct of an attack (in the nuclear context, transport, operational security and detonation of the weapon) are acting as pre-programmed (nuclear-armed) automatons. None of their actions, insofar as they have control over them, should run counter to the leadership's pre-conceived plan of how events can and should play out.

- B. **"Assertive"** is defined as a command system in which the leadership maintains control (either in person or, more likely, through obedient subordinates in contact with the leadership from the field) over relevant aspects of the operation (e.g., in the context of nuclear weapons, in the weapon's transportation and detonation). While preplanning may have occurred, alterations in the strategic environment allow for the leadership to make changes "on the fly." For example, missions can be called off altogether or adjustments can be made in targeting; however, all such

modifications can only be initiated by the leadership. Moreover, “assertive” arrangements can require that in-the-field subordinates must contact leadership at every step of the mission to receive further instructions (e.g., they may not even know that they are transporting a nuclear weapon and what the target is prior to some point within the mission itself [by the way, apart from the plane’s pilot, this was the case for the *Enola Gay*’s Hiroshima mission]).

- C. “Delegative” is defined as a system in which the leadership has empowered subordinates to make key decisions if necessary in the conduct of the operation (in the nuclear context, this would refer mainly to the weapon’s transport, targeting and detonation). In this case, the leadership may maintain assertive control over the weapon with authorization (e.g., devolution) of command given to subordinates in the event of certain predefined occurrences (for example, if deputies in the field lose communication with the leadership). Moving farther along the spectrum of delegation, leaders may simply allow deputies to act as they see fit in the field as the mission progresses (e.g., the football term of “make an audible” – when a quarterback makes a change of play at the line of scrimmage based on what the defense is showing).

In short, when compared to the other two types of arrangements considered in the profile (i.e., “pre-determined” and “assertive”) “delegative” arrangements give subordinates the greatest flexibility in the field.
