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**Interagency
Intelligence
Memorandum**

*The Likelihood of the Acquisition of Nuclear
Weapons by Foreign Terrorist Groups for Use
Against the United States*

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THE LIKELIHOOD OF THE ACQUISITION OF NUCLEAR WEAPONS BY FOREIGN TERRORIST GROUPS FOR USE AGAINST THE UNITED STATES¹

SCOPE NOTE

In treating the question of "the acquisition of nuclear weapons" in this memorandum, we have chosen to use the broader term "nuclear explosive" to mean either an actual nuclear weapon or a device intended to produce a nuclear yield. This definition excludes devices intended only to disseminate radioactive or toxic nuclear material (radiological weapons). This exclusion does not imply a judgment that radiological weapons are not important in this context. The term "acquisition" includes the seizure of a weapon or fabrication of a nuclear device. The term "use" in this paper includes both the threatened or actual detonation of a nuclear explosive.

This memorandum is addressed to the near term, i.e., to the next year or two. Foreign terrorist groups and the environment in which they operate are constantly evolving; the judgments we make here are of necessity generalizations based on patterns of terrorist behavior which are subject to change. We have excluded consideration of domestic US terrorist groups as being outside our area of responsibility.

¹ This memorandum was prepared by the Joint Atomic Energy Intelligence Committee of the United States Intelligence Board, with special contributions from the Central Intelligence Agency, the Defense Intelligence Agency and the Energy Research and Development Administration (ERDA). It was approved by the United States Intelligence Board on 8 January 1976.

CONCLUSIONS

A. The inherent constraints against a foreign terrorist attempt to acquire and use nuclear explosives against the US, taken in conjunction with the difficulties entailed, are sufficiently great that we judge such an attempt to be unlikely in the next year or two. In view of the increase in the tempo of terrorist attacks and in their daring and efficiency, however, we cannot have complete assurance that an attempt will not occur. Over the longer term, if the current trend of increasing terrorist violence continues, we would expect a corresponding erosion of the constraints against terrorist use of nuclear explosives.

B. The likelihood of a foreign terrorist attempt to acquire nuclear explosives will be greatly influenced by the perceived difficulties along the way. Terrorists are and will continue to be greatly sensitive to the quantity and quality of security systems protecting nuclear weapons and the materials from which nuclear explosives might be made.

C. Some foreign terrorist groups might conceivably attempt acquisition of a nuclear explosive by stealing nuclear material and fabricating their own device. The degree of security afforded nuclear materials is generally less than that afforded nuclear weapons. None of the individual steps involved would be beyond the capabilities of a sophisticated, well-funded group, but the probability of successfully completing all of the steps is considered to be fairly low. More importantly, by their nature terrorist groups would be unlikely to undertake projects of the sort which entail long-term commitment of resources for a dubious outcome. We believe, therefore, that any terrorist group determined to acquire nuclear explosives in the near term would more likely be motivated to attempt seizure of an existing weapon. *The ERDA representative does not agree with this conclusion. Seizure of a sufficient quantity of nuclear material to fabricate an explosive device could be just as credible from the terrorist's standpoint as a seized weapon and much easier to achieve. The subsequent threat that a workable nuclear device had been fabricated would have to be taken seriously.*

D. If an attempt at seizure of a weapon was made, the one targeted would probably be a US weapon deployed abroad.² This is true not only because of the wide deployment of such weapons but, more importantly, because of the great political importance assigned by

² We note that all US weapons deployed abroad have control devices of varying degrees of sophistication that are designed to insure weapon safety or to preclude unauthorized use and that would require time and effort to overcome.

terrorists to targets involving the US presence abroad. An attempt at seizure of a French or British nuclear weapon is judged less likely than an attempt against a US weapon. Even if successful, and with subsequent use against the US presence abroad, the symbolic effect would not be as dramatic as if a US weapon had been involved. Because foreign terrorist groups have had little success and have shown little inclination to operate within the continental US, an attempt to seize a nuclear weapon there, though possible, is less likely.

E. A foreign terrorist group which had achieved possession of a nuclear explosive abroad would probably use it against the US presence or against US allies and interests rather than against targets in the continental US.

F. By the nature of terrorist behavior patterns, we believe that some form of indirect use of nuclear explosives is more probable than direct use. Specifically, a major motivation for terrorist seizure of a nuclear weapon would be to acquire a credible threat for blackmail and/or publicity. It is judged that most terrorist groups attempting to seize a weapon would do so without the specific intention of detonating it. In an extreme situation, however, some might attempt a detonation.

G. Of the many terrorist groups operating in the world today, the most competent to attempt seizure of a nuclear weapon would be one of the Palestinian groups such as the Popular Front for the Liberation of Palestine or the present-day version of the Black September Organization.³ West European groups, because they operate in areas where US weapons are widely deployed, need to be carefully watched but have not yet demonstrated the sort of capabilities which would make a successful attempt very likely. One factor which could significantly increase the danger to US weapons in Europe would be joint operations between or among a Palestinian group, a West European group and, possibly, the Japanese Red Army.

³ A list of selected terrorist groups, and certain notations about them, is available on request.

Introduction

1. For the purposes of this paper we have considered those subnational terrorist groups which use systematic violence for the furtherance of political aims. This broad characterization takes in many separate entities in a spectrum ranging from small, poorly-organized fringe groups whose political aims are often extremely vague, to large, well organized and well funded groups whose aims are specific and realistic. The spectrum also comprehends great diversity in capabilities and levels of technical sophistication. Later in the paper we discuss the capabilities which would be important to any group attempting to acquire and use nuclear explosives and indicate the groups which we believe to have the greatest competence to do so. First, however, we discuss certain factors applicable to terrorists in general, including inherent constraints against use of nuclear explosives, attitudes and behavior relative to the US, modes by which nuclear explosives might be acquired, and the variety of ways such explosives could be used against US interests.

Inherent Constraints Against the Exploitation of Nuclear Explosives

2. The possible motivation of a terrorist group to acquire and exploit nuclear explosives seems obvious enough: possession of a nuclear explosive would give it enormously increased leverage in the pursuit of its goals. Certain inherent constraints against exploiting nuclear explosives are perhaps less obvious and need elaboration:

a. Most terrorist groups—and this applies to all of the more important ones—are subject to some degree to internally generated limits to the level of violence they are willing to inflict. They are much concerned with the propaganda value of their deeds and are aware that the level of violence inherent in the threatened or actual use of nuclear explosives might well be counter-productive in the sense that it would alienate vastly more people than it would attract.

b. All terrorist groups are subject to some degree to externally imposed limits on the level of violence they dare inflict. Terrorists operate relatively successfully today in a permissive environment fostered in large part by international rivalries. Politically sophisticated terrorist leaders would certainly be aware that the threatened use of a nuclear explosive—and certainly its actual use—might bring about unprecedented levels of international cooperation and determination which could result in the destruction of their movement.

c. Terrorist groups, even the more important ones, are not usually attracted to difficult targets. Typically they have not conducted open assaults against well-defended targets or undertaken schemes entailing long-term commitment of resources, preferring rather schemes yielding the greatest quick result for the least investment.

None of these points is sufficient in itself to provide comfortable assurance that no terrorist group will seriously consider acquisition of nuclear ex-

plosives. In combination they probably constitute a greater constraint than is generally thought, more so to the more sophisticated groups than to some of the smaller, more fanatical groups. It is particularly worth noting that from the terrorist point of view the first two points are very much related to the third; that is, the weight they will tend to give to the inherent constraints against an attempt will be much influenced by the perceived difficulty of achieving possession of a weapon. Terrorists are and will continue to be greatly sensitive to the quantity and quality of security systems assigned to nuclear weapons and to the materials from which nuclear explosives might be made.

3. In recent years, there has been an increase in the tempo of terrorist attacks and in their daring and efficiency. Over the long term, if the current trend of increasing terrorist violence continues, we would expect a corresponding erosion of the constraints against terrorist use of nuclear explosives.

Attitudes and Behavior Toward the US

4. Foreign terrorist groups have experienced great difficulty on those rare occasions when they have operated on US territory. For this and other reasons, they show little inclination to do so. However, many terrorist groups are very much interested in the more vulnerable US presence abroad. Almost all groups share a general antipathy to the established order as it exists in much of the world, and they tend very strongly to view the US as the prime representative of that order. This is true even of those groups which have highly specific political goals which primarily involve countries other than the US. The tendency is reflected in a remarkable aspect of the statistics on terrorist incidents of recent years: US personnel and property figure as direct victims in a very high percentage of incidents, even though the US is seldom the target country in the sense of the one against which demands are levied. It is clear that the US has high symbolic value in the eyes of terrorists of almost all types and that they are strongly attracted to incidents which have the potential for damaging US interests in those countries where we have important political, economic, and military ties. These two points, as will be shown, are of great importance to the question of where and how terrorists would

seek to acquire a nuclear explosive and the manner in which they might attempt to exploit it against US interests.

Modes of Acquiring Nuclear Explosives

5. Any terrorist group determined to acquire a nuclear explosive has only two choices: it can attempt seizure of an existing weapon or it can undertake the theft of nuclear material and fabrication of its own device. Either method would entail great difficulty, but neither can be called flatly beyond the capabilities of all groups. Even the less sophisticated groups might, by a combination of luck and daring, successfully accomplish seizure of an existing weapon. The option of actually fabricating a device would be foreclosed to all but a few of the more sophisticated groups.⁴

6. A terrorist leader of a large, competent group might be attracted initially to the option of fabricating a device. We mentioned earlier the terrorist preference for easy targets. A terrorist leader would assume—and could easily confirm—that in all countries nuclear weapons are more securely guarded than are nuclear materials. If he were at all aware of the complexities involved in nuclear fuel cycles (the information is readily available for a moderate investment in time and effort) he would reason that not only could he acquire nuclear material more readily, but that he would have a much better chance of making a successful theft. He could conceivably devise methods of theft (probably involving bribery of inside personnel) which would permit theft without detection or, at most, detection long after the event.

7. On the other hand, the very complexity which might make all this possible would serve as a considerable deterrent. In order to accomplish merely the successful theft of the material he would have to

⁴ We have considered and rejected as almost wholly incredible the proposition that an existing nuclear power might donate or sell a nuclear weapon to a terrorist group. The possibility that some nation not now a nuclear power might give technical or logistics aid to a terrorist group attempting to acquire a nuclear weapon is perhaps more nearly credible but still unlikely. Conceivably, some country—Libya for example—might covertly sponsor the theft by a terrorist group of a weapon or nuclear material for fabrication of a weapon, but that weapon would more probably be intended for the sponsoring country than for terrorist use.

do much of the basic research and assemble at least part of the team of experts which he would need later for fabrication of the device. He would need to weigh the cost of this initial investment in time and resources against the fact that the attempted theft of material, even though it might be less hazardous than theft of a weapon, could still fail. Assuming a successful theft, he would need a secure place where his team of experts could work unmolested for the time required to fabricate the device. The work would necessarily proceed with the full knowledge that failure, including catastrophic failure, would be a distinct possibility. It is our judgment that none of the individual steps involved here—through successful design and fabrication of a device—would be beyond the capabilities of a sophisticated, well funded group, but that the cumulative difficulties of carrying through all the steps in the necessary order make the probability of success fairly low. More importantly, we find it unlikely that any terrorist group as now constituted would be inclined to invest the time, patience, and long-term commitment of resources to an undertaking of such dubious outcome. Undertakings of this sort are inconsistent with the behavior patterns of most terrorist groups which, as we noted previously, are chiefly interested in achieving maximum return on minimum investment. (This situation may begin to change as some groups—notably in the Mideast—tend toward quasi-national status.) Therefore, we believe that any group committed to the acquisition of nuclear explosives in the next year or two would more likely be motivated to attempt seizure of an existing weapon rather than fabrication of a device because of their likely perception that they would have a greater chance of success of achieving their objective. (*The ERDA representative does not agree with this judgment. See Conclusion C on page 2.*)

8. A group which had determined to attack a nuclear weapon site or convoy for purposes of acquiring or otherwise exploiting a weapon could choose among the weapons of the US, the UK, France, the Soviet Union, China, or conceivably, India. We believe that the choice would probably be a US weapon abroad. This would be true, if for no other reason, because of the large number of US

weapons deployed throughout parts of the world, most notably Western Europe, where terrorist groups operate successfully. It would be true in any case for reasons discussed elsewhere in this paper, namely the great symbolic value of the US in terrorist eyes and the importance they attach to targeting the US presence abroad.

9. The locations of most US storage sites abroad are locally known and could be ascertained by any terrorist group with a moderately good intelligence potential. Detailed intelligence about the site could be fairly readily acquired in many cases, particularly where intergroup cooperation was involved. The terrorist group would have to consider the fact that the storage sites are located on or adjacent to military installations, are well protected by physical security and guard forces, and have additional security response forces on call in close proximity. Since foreign terrorist groups have rarely operated on US territory, attempted seizure of a weapon in the continental US is not likely.

10. To at least some terrorist groups, theft of UK or French nuclear weapons would be politically attractive. However, their symbolic value is not nearly as great in the eyes of most terrorists as those of the US. If a terrorist attempt should occur against British or French nuclear weapons, it would probably involve some group with a particular animus toward one of these countries. It might also occur if some group believed French or British weapons to be more vulnerable than others.

11. The Soviet Union and China are not regarded as part of the world order which most terrorist groups oppose, and their weapons would not normally be politically attractive targets. Soviet weapons are not very widely dispersed abroad. Chinese weapons are not deployed abroad at all and are in any case relatively few in number. In view of these factors, and in the light of what we know with respect to Soviet and Chinese nuclear security practices, we believe it highly unlikely that any terrorist group will attempt the theft of a Soviet or Chinese nuclear weapon.

12. India is not believed to have a stockpile of nuclear weapons at this time; it may or may not accumulate one in the future. It is possible that more or less complete weapons or weapon sub-assemblies now exist in R&D or production fa-

cilities somewhere in India, but uncertainty as to their existence would make them unattractive to terrorists, at least for the near future.

Varieties of Use of a Nuclear Explosive Against the US

13. A terrorist group in possession of a nuclear explosive might use it against the US in one of the following direct ways:

a. Clandestine introduction into the US and secret emplacement (probably in a large city but conceivably in some other target). Announcement of the emplacement would be followed by demands for political concessions, ransom, etc.

b. Similar emplacement, etc., against a US base abroad.

c. Similar emplacement, etc., against a country of particular interest to the group which at the same time has important political, economic, or military ties to the US.

We believe the first of these is the least likely for the reasons given previously concerning the abilities of terrorists to operate in the US and attitudes toward the US.

14. The three possible modes of employment just described assume full and effective possession of a nuclear explosive by the terrorist group. By this we mean a device under the control of the group to the extent that it could transport the device to the desired location and detonate it, if necessary, with a reasonable presumption of obtaining a substantial nuclear yield.

15. On the other hand, situations can be envisaged in which a group would be in a position to exploit a nuclear weapon without being in effective possession of one. A group might, for example, seize a nuclear weapon storage facility or convoy and, either by design or by the nature of the developing situation, not make a clean escape with a weapon. A typical terrorist hostage-and-barricade situation might then develop, with the weapon or weapons (possibly along with personnel) serving as hostages. In this situation, the group would be markedly limited by its inability to move the weapon and emplace it against a target of its own selection. It would also be limited by uncertainty as to its

ability to detonate the weapon in a nuclear way and its willingness to do so, given that escape would probably be foreclosed.⁵ The mere possibility of a nuclear detonation, however, or the possibility of a nonnuclear detonation in which fissile material might be disseminated over a wide area, would give the group considerable leverage in negotiations.

16. Consideration of situations of this sort points up the fact that there are important indirect ways of using nuclear weapons against the US, if the weapons are of US origin. Any terrorist incident involving US nuclear weapons abroad could have considerable impact on US relations with the host country and with other countries potentially subject to the same type of incident. Any indication that the US appeared incapable of protecting its weapons and controlling their use would constitute a propaganda victory for the terrorists and could lead to forced adjustment of our nuclear weapon deployment policies.

17. Given the nature of terrorist behavior in the past and the great difficulty entailed in achieving effective possession of a nuclear weapon, we believe that some such "less-than-effective possession" and indirect use of a nuclear weapon is much more likely than the more straightforward cases of direct use discussed at the beginning of this section. It is even possible that a successful result (from the terrorist viewpoint) could be achieved by the seizure of a nuclear weapons installation with the intent only of obtaining maximum publicity.

18. Because of the internally and externally imposed limits to violence discussed earlier, we believe that in the case of either direct or indirect use, most terrorist groups would prefer to carry through negotiations to a more or less successful conclusion without detonating the weapon. They would probably be willing to bargain and to trim their demands to avoid detonation. Pushed to an extreme, however, some groups would probably

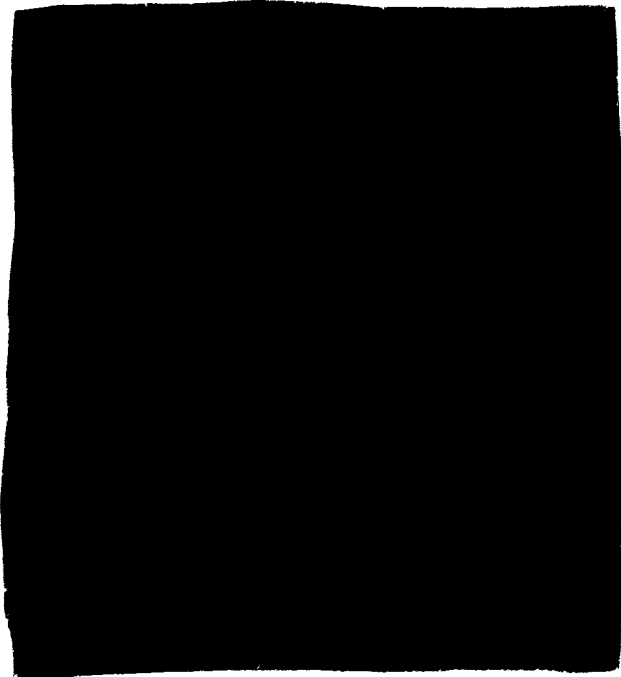
⁵ The group's ability to detonate the weapon in a nuclear way would be in doubt because of the complexity of fuzing and firing systems and the inclusion of protective devices in the weapon. Such doubts might also exist in cases where a group had successfully escaped with a weapon, but we presume that, given sufficient time, a sophisticated group would have a good chance of overcoming the hindrances to detonation.

attempt to detonate the weapon, even if this entailed their own deaths. As an alternative option, or in cases where they were unable to achieve a nuclear detonation, they might elect to detonate a weapon or weapons in a nonnuclear way merely for the sake of destroying it or in the expectation of disseminating toxic material.

Capabilities of Existing Terrorist Groups

19. We have reviewed available information on the major terrorist groups now operating or recently operating in various parts of the world. Based on this review, we have no evidence that any of these groups intend to acquire nuclear weapons. After considering the relative capabilities of groups, areas of operation, etc., we have identified those which appear to constitute the greatest potential threat. (We cannot rule out the possibility that some relatively unimportant group—perhaps even one unknown to us—might attempt a nuclear weapon incident.)

20. On the basis of the history of significant terrorist assault operations and our concepts of existing and planned security measures associated with nuclear weapons, we believe the following to be a fair model of a terrorist team which might attempt exploitation of nuclear weapons with some reasonable assurance of success:



21. In the present international context, only those groups based in countries where nuclear weapons are stored or transported or those groups which have demonstrated the capability to conduct significant extraterritorial activities are considered high-level threats to nuclear weapons. In effect this tends to rule out Latin American and most Far East groups. The former, although among the most competent and violent in the world, have demonstrated neither the capability nor the intent to project their activities on an international scale. Far East groups (except the Japanese Red Army—JRA—which operates primarily in the Mideast and in Europe) are largely involved in traditional insurgent guerrilla operations which are directed primarily against indigenous forces and installations.

22. *Middle East Terrorist Groups.* Terrorist organizations associated with the Palestinian Movement which have successfully conducted extraterritorial operations of some significance, such as the Popular Front for the Liberation of Palestine (PFLP) and the present-day version of the Black September Organization (BSO), probably have the capability to successfully conduct the type of operation required to seize a nuclear weapon. They have demonstrated the ability to obtain and analyze targeting intelligence data, to sustain an effective logistics support apparatus either unilaterally or with the aid of friendly states, and to obtain transport and use sophisticated weapons. Their operations are characterized by a degree of fanaticism and motivation quite apart from their Western European contemporaries. Additionally they have opened channels of cooperation (in terms of logistics support, intelligence acquisition, training) with many of the Western European terrorist organizations. All of these capabilities, coupled with the training received by these Palestinian organizations from the USSR and China in unconventional warfare techniques and the experience gained from crossborder guerrilla activities against the state of Israel, make these two groups (BSO and PFLP) bona fide potential threats to the security of nuclear weapons.

23. *Western European Terrorist Groups.* No existing Western European terrorist organization has demonstrated the capability to unilaterally conduct the type and range of activities which would be necessary to undertake seizure of a nuclear weapon with any hope of success. Past activities conducted

by these groups have generally consisted of covert bombings, assassinations, and political kidnappings. Military installations and facilities targeted have usually been covertly bombed—not assaulted, and these have usually been isolated and/or relatively undefended targets.

24. *Joint Operations.* One factor which would significantly increase the threat to nuclear weapons by Western European terrorist organizations would be joint operations by these groups with the Palestinians, or possibly with other organizations such as the JRA. Joint Palestinian/JRA operations

have occurred in the past. Relationships between Palestinian and Western European terrorist groups have yet to be extended to the operational category, but support type activities (provision of safe-houses, explosives, documentation, vehicles, and intelligence) have been identified among and between various Western European terrorist groups, the Palestinian terrorist groups and the JRA. Such mutual support activities can be expected to continue. Should joint activities be extended to the operational sphere, the potential threat to nuclear weapons would be substantially increased.