April-June 1995
PB 34-95-2

Military Intelligence
PROFESSIONAL BULLETIN

BREAKING OUT...
The Joint Intelligence Architecture

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Effective 19 March 1995 the area code for most of Arizona, to include Fort Huachuca, changed from 602 to 520.

Writers of the Year and Quarter

MIPB is pleased to announce the 1994 winners of the Writer of the Year contest. **Writer of the Year:** Major Scott R. McMeen, *"Fire Support Doctrine: Sensor to Shooter,"* Oct-Dec '94. **Runner-up:** Lieutenant Colonel Karl W. Eikenberry, *"Light Infantry Battalion Commander, S2, and Scout Platoon Leader,"* Jan-Mar '94. **Honorable Mentions:** Captain Adam R. Hinsdale, *"Pioneer: Nemesis in the Desert Sky,"* Jul-Sep '94. Major Ewald H. Coet, *"The MDCI Analysis Void,"* Jul-Sep '94. Captain Gregory Scott Weaver, *"An Example of Tactical Tailoring and Other Force Projection Principles,"* Apr-Jun '94.

Lieutenant Commander Sawyer is the **Writer of the Quarter** (Apr-Jun '95) for, *"JTF JIC Operations: 'Critical Success Factors.'"*

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force deployment data (TPFDD) essential equipment arrived with the troops on D-day or D+1. NIST, JILE, JOSE, and JCMEC all reported with their systems to support our efforts.

Internal information flow centered around the all-source analysis section. A number of sources provided information to the JIC (e.g., the major subordinate commands, U.S. Embassy, components). We had to fuse all this information into a relevant and accurate product. The JICWO would hold fusion meetings with all section chiefs to ensure an exchange of information and analysis on a regular schedule. These fusion meetings were critical to properly assess current activity and project future activity. The meetings also ensured that all sections focused on answering priority intelligence requirements and supporting the "warfighters."

Conclusion

JTF JIC operations in Haiti were an intelligence success for all involved—from brigade S2s to the national level J2. The systems and procedures we employed and tested successfully during exercises supported the intelligence cycle and the commander's needs in actual operations. To "stand up" a JTF JIC and make it work—prior training, JIC experience, information systems technology familiarity, and strong leadership are all prerequisites. You must fully integrate human and material resources to form a cohesive, functional intelligence support node. The major lessons learned from Haiti JTF JIC operations follow.

JDISS training. JDISS training needs continued emphasis among USACOM and component intelligence organizations. Lack of system availability to date has slowed the training process and prevents component personnel and augmentees from maintaining proficiency. Where systems are available, it is imperative that supervisors continue to enforce a training program. JDISS operational and analytical techniques are perishable skills.

Request for information (RFI) management. Components are unfamiliar with the USACOM Automated Tracking System (ATS) for RFI management. We encountered numerous shortfalls due to a lack of training. The USACOM ATS is a single comprehensive data base which efficiently processes RFIs at all command levels. Manual RFI management is not efficient—you can misplace papers, there is no query capability or automatic tracking, and users in remote locations cannot access RFI responses. A key feature of the ATS is information sharing—it facilitates management of all RFIs and allows users to determine the status of RFIs. Using the ATS, the JTF JIC with the theater JIC can manage, track, and account for all RFIs efficiently. The ATS also provides a historical data base for future requirements.

Augment and train JTF core components as early as possible. The earlier USACOM provides JTF training to the JTF core component, the smoother the transition from operating under Service-specific doctrine to operating under joint and theater doctrine. USACOM augmentation teams from the FSD can facilitate the transition from an analysis and control element structure to a JIC structure. These teams will deploy as early and as often as needed during the pre-crisis phase. They ensure that the JTF core component is familiar with JTF operations and USACOM intelligence TTP.

Glossary

ASAS: All-Source Analysis System

DSNET: Defense Secure Network

FAST: Forward Area Support Terminal

FSD: field support directorate

GENSER: General Service (communications)

GMF: ground mobile forces (circuit)

INs: USAF intelligence officers equal to Army G2s and S2s

INMARSAT: International Marine Satellite

JCMEC: Joint Captured Materiel Exploitation Center

JDISS: Joint Deployable Intelligence Support System

JIC: Joint Intelligence Center

JICWO: JIC watch officer

JILE: Joint Intelligence Liaison Element

JOSE: Joint Operations Support Element

JTTP: Joint tactics, techniques, and procedures

JWICS: Joint Worldwide Intelligence Communications System

LAN: local area network

MITT: Mobile Integrated Tactical Terminal

MSE: Mobile Subscriber Equipment

NEO: noncombatant evacuation operation

NIST: National Intelligence Support Team

SCI: sensitive compartmented information

STICS: Scalable Transportable Intelligence Communications System

TPFDD: time-phased force deployment data

TROJAN SPIRIT: TROJAN Special Purpose Intelligence Remote Integrated Terminal

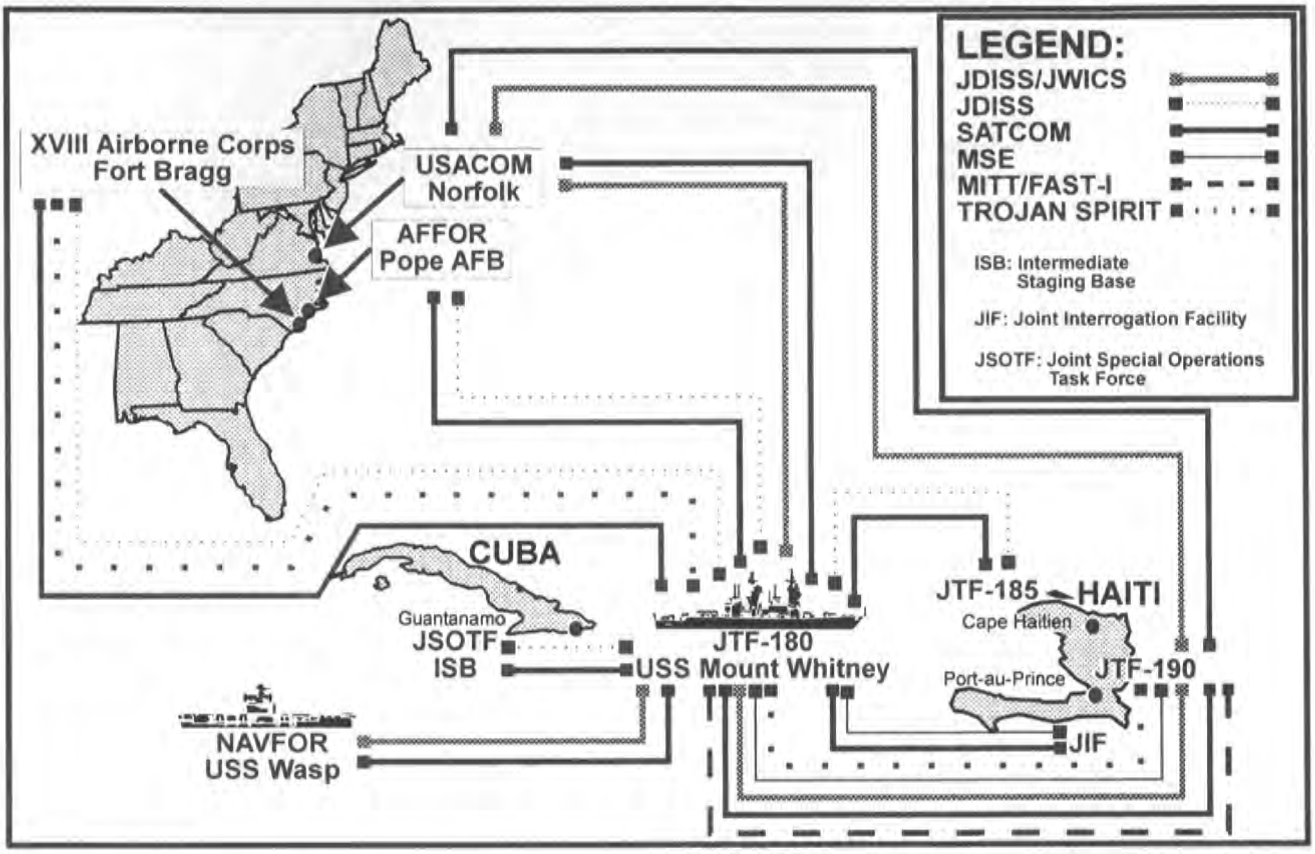
WAN: wide area network

LCDR Sawyer is a naval intelligence officer at the Field Support Directorate (FSD), USACOM in Norfolk, VA. He is a team leader for a USACOM deployable joint intelligence training and augmentation team. LCDR Sawyer has an extensive naval intelligence background and served as the Watch Officer, USACOM JIC. He holds two bachelor's degrees and a master's degree in Information Systems Technology.

by Major Carl Dominic

XVIII Airborne Corps Intelligence Architecture In Haiti

Intelligence is critical to the success of any mission. During Operations RESTORE and UPHOLD DEMOCRACY, the complex intelligence architecture set the standard for future operations. The architecture started with normal XVIII Airborne Corps garrison communications and expanded as the operation evolved. This initial architecture included a variety of voice, message, data, and imagery systems. USACOM further provided unique and essential systems and communications support throughout the Joint Task Force-180.



MSE: Mobile Subscriber Equipment (MSE) is a full-service tactical communications network that combines landline, various line-of-sight radio frequency, and satellite communications. JTF-180 operationally deployed an MSE subsystem aboard a U.S. Navy vessel for the first time. We lashed the MSE van to the deck of the USS Mount Whitney and provided MSE access to the JTF-180 staff afloat. MSE was a major success during the operation because of an exceptionally low rate of maintenance failure and it was among the first reliable communications for deployed units in Cape Haitien.

AUTODIN: Automatic Digital Network (AUTODIN) is a common DOD network. It provides worldwide record message traffic conectivity to all subscribers and includes Defense Special Secure Communications System and General Services communications. A computer-based local area network (LAN) provided analysts access to message traffic within their work area.

TENCAP: Tactical Exploitation of National Capabilities (TENCAP) is a group of systems that provide immediate access to national-level intelligence and data bases. Our TENCAP systems were initially located at Rae Compound, Fort Bragg. Later, we deployed some of these systems to Haiti, including Forward Area Secondary Dissemination and Tactical Receive Equipment-Improved (FAST-I) and the Mobile Integrated Tactical Terminal (MITT).

SATCOM: Satellite communications (SATCOM) are networks that provide long-haul, voice and data, connectivity. We established a SATCOM network between the JTF and major subordinate elements. I cannot overstate the importance of satellite communications to the success of this operation. We routed (either immediately or ultimately) virtually all major communications systems within the Joint Operations Area (JOA) and between the JOA and the United States through SATCOM.

JDISS: Joint Deployable Intelligence Support System (JDISS) is an integrated set of commercial software that provides formal and informal message traffic, access to data bases, imagery transfer, and chatter. USACOM provided so many workstations with JDISS within the JOA that they became the standard intelligence communications terminal.

JWICS: Joint Worldwide Intelligence Communications System (JWICS) is a program that provides a secure high-speed multimedia capability (continuous interactive video teleconferencing). All JTF components and upper-echelon subscribers used JWICS.

MAJ Dominic served as the Collection Requirements Officer, XVIII Airborne Corps during the operation. He is currently the Plans Officer, Combined Joint Staff, Combined Forces Command, U.S. Forces Korea.

Service members aboard the USS Mount Whitney served as the JTF-180 JIC during Operations RESTORE and UPHOLD DEMOCRACY.

deploying ACE personnel. This configuration allowed us to act as the JTF-180 JIC until personnel from the XVIII Airborne Corps ACE arrived on the USS Mount Whitney and activated the JIC.

All sections of the CMISE surged to support the operation. The IPS moved into the ACE building and took charge of all-source production. We conducted shift change briefings at 0600 and 1800 to review all single-source intelligence and ensure its dissemination. The IPS continued to produce current situation intelligence products for all Services and the national defense community. We still published a DISUM every day at 1500 and added a periodic intelligence summary (INTSUM) that outlined events that occurred overnight. Thus, we provided current information to all of our consumers every 12 hours.

The CM&D section ensured that all of these products and intelligence reached our consumers. They disseminated this intelligence to deployed forces and other major subordinate commands via Automatic Digital Network (AUTODIN) and other means. Additionally, they maintained connectivity using the TROJAN Special Purpose Intelligence Remote Integrated Terminal (SPIRIT), JDISS, and Mobile Subscriber Equipment (MSE).

Meanwhile, four CMISE soldiers formed an intelligence liaison team to support the JTF-180 Joint Operations Center (JOC). Initially, their main mission was to keep the J2 staff informed and to sustain the link between the intelligence support base, at Fort Bragg, and the JIC, on the USS Mount Whitney.

As personnel from all the Services augmented the ACE, 82d Airborne Division and CMISE SIGINT personnel, the SRF started to perform joint-SIGINT operations. SIGINT soldiers processed, analyzed, and disseminated intelligence to support the commander. Based on incoming information, analysts prepared and updated a daily synopsis of events. Analysts provided the synopsis to the senior intelligence officer at shift change and the daily brief to the Commander, JTF-180.

Imagery analysts from the CMISE and corps performed second- and third-phase imagery exploitation on selected (time-sensitive) targets to include pertinent descriptive information. Together, they disseminated a total of 7,980 prints and 1,271 negatives to deployed units during these phases.

Gradually, members of the intelligence support element deployed to the USS Mount Whitney or to holding areas in preparation for the entry. The vast majority of CMISE personnel stayed behind. We ensured that there were no intelligence gaps as members of the XVIII Airborne Corps deployed or were "locked down" in holding areas. After intelligence personnel arrived on the USS Mount Whitney, they established the JIC. We then became an alternate JIC, while still acting as the intelligence support base. If communications aboard the ship had failed, we would have served as the JIC.

Aboard the USS Mount Whitney, the SIGINT representative of the intelligence support element consolidated all SIGINT collection that occurred in Haiti. This soldier disseminated the product to all consumers in an ASAS-Warrior data base over the Defense Secure Network 3 (DSNET 3). This SIGINT product proved very valuable to JTF-180.

The situation in Haiti did not improve. The IPS prepared two daily briefings for the JTF Commander, Lieutenant General Shelton, who remained at Fort Bragg until two days before deployment. We gave him and his staff the latest all-source situation intelligence available.

CMISE personnel also operated the corps' Worldwide Intelligence Communications System (JWICS). This secure video-teleconferencing system provided Lieutenant General Shelton and his staff the capability to plan and discuss the situation with other commanders. It also afforded the JTF commander the opportunity to confer with senior members of the defense community. One session even included the President. The system received heavy use during the course of the operation. General officers from all commands found teleconferencing a useful coordination tool.

Intelligence analysts also communicated and answered many questions over JWICS.

Entry Operations

The culmination of all planning occurred with the 82d Airborne Division's "N-hour" sequence. The CMISE role in this was twofold. First, CMISE began an intense period of situation development and updated the intelligence picture every two hours. Second, as the soldiers loaded onto the aircraft at Pope Air Force Base (AFB) we provided a rampside briefing team to present the most current ground situation to key leaders. We developed "key reads" to ensure we maintained a timely, relevant, accurate, and predictive intelligence picture for those key leaders.

After the aircraft carrying elements of the 82d Airborne Division returned to Pope AFB we received orders to prepare for an unopposed entry. Operation RESTORE DEMOCRACY became Operation UPHOLD DEMOCRACY. The 82d Airborne Division remained on alert, while the 10th Mountain Division and JTF-190 now assumed the primary role in the operation.

Support to JTF-190

Once the JIC (on the USS Mount Whitney) was fully operational, the CMISE IPS (at the intelligence support base) was able to shift its focus to a long-term analysis of the Haitian problem. Colonel Quirk, the 525th MI Brigade Commander, directed the intelligence support base to create a strategic assessment of the Haitian situation by analyzing the historical background and current events to predict the success of future operations. Still on 24-hour operations, we began to research and prepare this strategic assessment.

At the same time, our counterintelligence (CI) analysts began to create products to assist JTF-190 on the ground. With the help of IPS analysts they produced link diagrams, association matrices, and event matrices that proved extremely useful to JTF-190 operations. Furthermore, the CI analysts established connectivity to various national agencies and major commands—sharing data and information. Meanwhile, the Joint Operations Center liaison team returned to the intelligence support base. The CM&D section continued to disseminate CI products via AUTODIN and inform subordinate units of current operations. SIGINT analysts supported JTF-190 in order to provide continuity as they conducted ground operations in Haiti.

Soldiers from the CMISE intelligence support element supported the JTF-190 JIC at the Port-au-Prince industrial complex. JIC operations began when the TROJAN SPIRIT arrived. They established communications 30 minutes after arrival, and our support package ASAS was operational in another 30 minutes. The intelligence support element actually expanded its role within the JIC. They tapped into the INTELINK network and provided national level intelligence products to augment support from the National Intelligence Support Team (NIST). The intelligence support element provided various intelligence products to include the U.S. Army Forces Command INTSUM, the "Early Bird," every day.

Another Transition

Just as the CMISE role in the Haitian situation stabilized, conditions in Southwest Asia became tense. When Saddam Hussein moved forces to the Kuwaiti border, several corps units were put on alert. The operations (both Operations SOUTHERN WATCH and VIGILANT WARRIOR) showcased the CMISE's value to the corps. Still on 24-hour operations in support of Haiti, we shifted our focus to monitor the Iraqi troop movements (we published both collateral and comparted DISUMs). With our connectivity to the 513th MI Brigade (EAC), we were able to retrieve and tailor several critical intelligence products and data bases for the corps' use. These included intelligence estimates, intelligence reports, OB guides, and an ASAS-W SIGINT data base. We also prepared morning briefings for Major General Davis, Deputy Commanding General, XVIII Airborne Corps.

These developments gave the CMISE an opportunity to demonstrate our flexibility—to monitor the rest of the world while the XVIII Airborne Corps remained engaged in a contingency operation. Since the corps' primary focus was on Haiti, CMISE personnel read messages, looked for indicators, and performed analysis and situation development on other countries.

Conclusion

During operations in Haiti, the CMISE proved that it could support corps split-based intelligence operations during a contingency. At the intelligence support base we served as the JTF-180 JIC while corps personnel moved forward. Once the corps assumed primary responsibility for intelligence operations (on the USS Mount Whitney), we served as the alternate JIC and intelligence support base to provide continuity and communications backup. The CMISE provided several strategic intelligence products and studies to the deployed forces. We then shifted focus to Iraq to support several other corps major subordinate commands that prepared to deploy in support of Operations SOUTHERN WATCH and VIGILANT WARRIOR.

As with any operation, there were some "glitches." However, we will learn from our mistakes and continue to provide the XVIII Airborne Corps and its subordinate units the highest quality intelligence possible.

This article was a collaborative effort of the officers, warrant officers, and NCOs of the XVIII Airborne CMISE. 2LT Tania Chacho, Chief, Counterintelligence and HUMINT Analysis Section (CHAS), XVIII CMISE, compiled and edited the article.

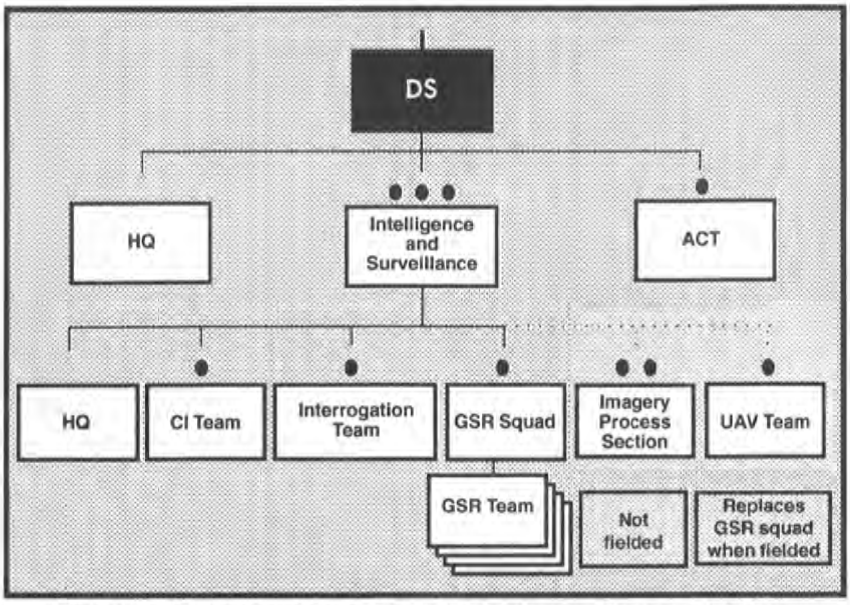


Figure 2. Organization of the DS Company, Heavy Division.

ucts at higher echelon organizations. The division's analysis and control element (ACE) is a primary source of support to the ACT. When augmented with the TROJAN Special Purpose Intelligence Remote Integrated Terminal (SPIRIT), the ACT can conduct split-based operations, "pulling" intelligence from an intelligence support base.

2. The operations platoon provides support and conducts asset management of the DS MI company's CI team, interrogation team, and GSR section. The Army will add an imagery processing section and UAV section to the DS MI company when supporting systems are fielded. The UAV section will replace the GSR section in heavy divisions. Figure 1 shows the organization of a SRIG and lists SRIG assets and summarizes their capabilities.

The intelligence support base forms the foundation for Service component split-based operations when used. In Joint Task Force (JTF) operations, the J2 designs the overall intelligence architecture and approves Service component split-based operations. Army split-based operations complement (not circumvent) the joint intelligence architecture. The division G2 section and ACE serve as the DRB's intelligence support base. This enables the DRB commander to "pull" ground-specific intelligence from his normal source. This is especially important between the predeployment and operations stages of a force projection operation. During these stages, split-based operations reduce the possibility of intelligence shortfalls which could arise from reliance on an evolving architecture.

Though the MEF G2 is the DRB's primary source of intelligence in theater, the intelligence support base can produce tailored products, maintain accessible data bases, and conduct remote collection. It can also provide the DISE and follow-on IEW assets if the operation requires the deployment of additional divisional forces.

Integrating IEW Operations

Army and Marine Corps IEW operations share the common objective—providing the combat commander the intelligence he needs to accomplish the mission and sustain combat power. Service IEW doctrine, organizations, and systems provide significant degrees of compatibility and interoperability. The clear articulation of Service intelligence expectations, capabilities, and limitations is paramount to effective IEW integration and subsequent operations. To plan and execute integrated Army and Marine Corps IEW operations consider the following.

Liaison. Liaison between MEF and DRB intelligence organizations is one of the first tasks in an integrated operation. This is particularly critical between units that have not routinely trained together and possess differing capabilities. Liaison teams support the execution of IEW operations and the timely flow of critical intelligence. They can also broker the allocation of IEW resources and requirements between commands. As a minimum, the MEF G2 must provide a liaison team to the subordinate DRB S2. If the DRB is subordinate to the MEF Ground Combat Element (GCE), the MEF GCE G2 must establish liaison with the DRB S2. The MEF and DRB could establish additional liaison teams to help integrate collection, production, or dissemination.

Intelligence requirements. The commander's intelligence requirements, concept of operation, and intent drive the intelligence effort. The commander and his staff use intelligence preparation of the battlefield (IPB) to identify the knowns and unknowns about the enemy, the area of operations, and other factors that influence the operation. Gaps in knowledge the commander and staff identify become intelligence requirements, some of which the commander designates as priority intelligence requirements. **Joint Pub 2-0, Joint Doctrine for Intelligence Support to Operations,** and **FM 34-2, Collection Management and Synchronization Planning,** offer more detail on intelligence requirements and their role in intelligence operations.

Consider the following when addressing Army and Marines Corps Integration (AMCI) intelligence requirements:

- ☐ The DRB submits requests for intelligence information (RII) and IEW support to the MEF.
- ☐ MEF intelligence requirements must support and remain sensitive to DRB needs. For example, the MEF commander may need to provide additional information on enemy antiarmor capability against M1A1 Abrams tanks to the DRB.
- ☐ Shortages of military linguists trained in the target language may require the MEF to cross-level Army and Marine linguists between Service CI, interrogation, and signals intelligence units.
- ☐ The MEF and DRB must establish a common battle damage assessment methodology and criteria.

Processing and Communications. The ability to move information and distribute critical intelligence between the MEF and DRB is essential. The MEF and DRB must plan, resource, and test the intelligence communications and processing architecture before the DRB begins operations. This may require additional equipment and personnel to ensure interoperability between Services and fully exploit the potential of IEW systems. It is especially important to establish connectivity using systems such as the Army ASAS, Marine Corps Intelligence Analysis System (IAS), and JWICS and JDISS.

The MEF and DRB must also consider how to allocate limited numbers of IEW systems like the Joint STARS Ground Station Module (GSM), UAV Ground Control Station, and TROJAN SPIRIT between Services. The MEF may need to redistribute Service-unique resources and capabilities based on the needs of the total force or to support the MEF's priority of effort. For example, the commander may commit the bulk of Marine Corps radio battalion assets to support the DRB when he designates the DRB mission as the main effort. Conversely, the MEF G2 could position the DRB's only Joint STARS GSM at the MEF command post to provide the MEF commander a better understanding of the battlefield.

Why Deploy the DS MI Company?

Whether to deploy the DS MI company with the DRB in AMCI operation is an issue for discussion in some quarters. The U.S. Army Armor Center wrote in its initial draft of **FM 71-3, The Armored and Mechanized Infantry Brigade** (dated 31 October 1994), that the MI company does not deploy with the armor brigade. They based their conclusion in part on outdated MI doctrine and organizations.

The Army is fielding new MI doctrine, organizations, and equipment specifically designed to meet the IEW demands of a force projection Army. As described earlier, brigade IEW assets are very balanced and mobile. These assets along with a new doctrine stress the importance of split-based operations. Together they make brigade IEW more powerful and responsive to the brigade commander's intelligence requirements.

The Armor Center's **FM 71-3** also overestimated the Marine Corps' capability to meet the intelligence requirements of the brigade. The addition of an Army armor brigade to a MEF without the DS MI company will severely tax the limited number of Marine Corps IEW assets. The Marine Corps intelligence system is an austere organization—deployments, personnel turnover, and a limited budgets to acquire IEW equipment challenge it daily. Spreading Marine IEW assets to cover the MEF plus a DRB could degrade the overall intelligence effort and might not meet the DRB's support expectations.

Army doctrine and training stress that units should form habitual relationships between combat, combat support, and CSS units. These habitual relationships help the commander build an effective combined arms and services team that can overcome all challenges on the battlefield. Commanders executing a force projection operation will encounter the unexpected. Failure to deploy the DS MI company breaks up the brigade team and limits the commander's ability to respond to the changing situation.

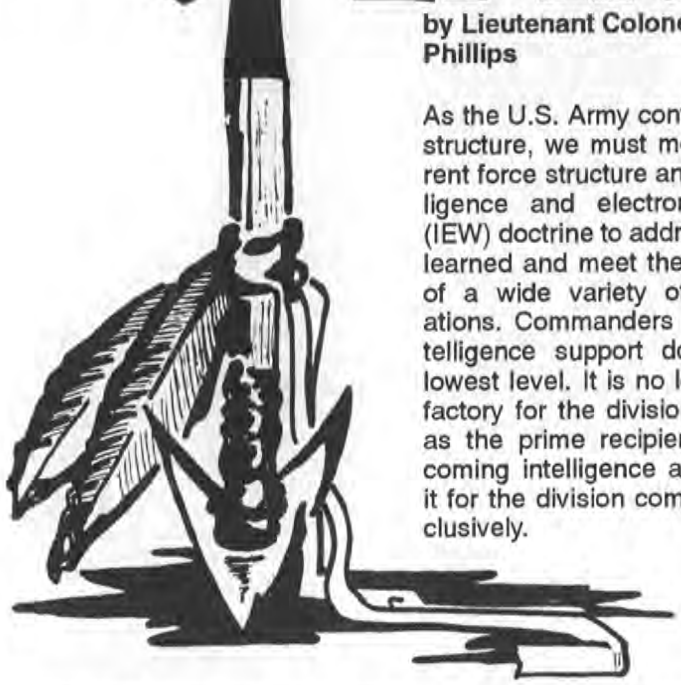
DRB IEW in AMCI operations builds upon the strengths and similarities of Service IEW operations, organizations, and doctrine. The DS MI company is an integral component of DRB IEW operations and significantly enhances MEF IEW operations. Tactical tailoring ultimately determines the composition of DRB IEW support. However, the commander should consider the brigade S2, the BICC, and the DS MI company the foundation of his IEW support. **Don't leave home without it.**

Endnotes

1. **FM 25-100, Training the Force,** 15 Nov 1988.
2. **FM 34-1, Intelligence and Electronic Warfare Operations,** 27 Sep 1994.
3. **FM 34-2, Collection Management and Synchronization Planning,** 8 Mar 1994.
4. **FM 34-80, Brigade and Battalion Intelligence and Electronic Warfare Operations,** 15 Apr 1986.
5. **FM 71-3, The Armored & Mechanized Infantry Brigade,** Initial Draft, 31 Oct 1994.
6. **FM 90-31/FMFRP 2-77, Army and Marine Corps Integration in Joint Operations** (Final Coordinating Draft), 1 Feb 1995.
7. **FM/FM 3-21, MAGTF Intelligence Operations,** 1 May 1991.
8. **FM/FRP 3-28, Tri-MEF Standing Operating Procedures for Field Intelligence Operations,** 27 Apr 1992.
9. **Joint Pub 2-0, Joint Doctrine for Intelligence Support to Operations,** 12 Oct 1993.
10. *"Back to the Gulf"* by LTG John H. Cushman, USA (Ret.), **PROCEEDING,** US Naval Institute, Dec 1994, Volume 120/12/1,1102, pages 35-36.
11. Table of Organization and Equipment 34397A, MI Company (Direct Support) MI Battalion, Army of Excellence, 4 Nov 1994.

SFC Taylor is NCOIC, Doctrine and Publications Division, DOTD, Intelligence Center, Fort Huachuca, AZ. He has a bachelor's degree from the University of Maryland and is a graduate of the National Security Agency's Senior Cryptologic Supervisors Course.

INTELLIGENCE TO THE POINT OF THE SPEAR



by Lieutenant Colonel Gary E. Phillips

As the U.S. Army continues to restructure, we must mold our current force structure and new intelligence and electronic warfare (IEW) doctrine to address lessons learned and meet the challenges of a wide variety of new situations. Commanders demand intelligence support down to the lowest level. It is no longer satisfactory for the division G2 to act as the prime recipient of all incoming intelligence and interpret it for the division commander exclusively.

Force projection and evolving intelligence doctrine demand innovative solutions to produce intelligence in support of commanders at every echelon. We must develop ways to get a common enemy "picture" to the "point of the spear."

The Scenario

The battalion was on the move again. Our mission was to secure a road junction for a UN convoy delivering food to a besieged village. In the battalion tactical operations center (TOC), the S2 reviewed recent imagery of the road junction and the battalion's route to the objective. The direct support (DS) company's analysis control team (ACT) queried the Deployable Intelligence Support

Doctrinal Perspective

LTC Phillip's article is an excellent example of adapting existing resources to new doctrine. However, there are some differences between these techniques and existing doctrine. This situation reflects the lack of updated division and brigade IEW doctrine. The following issues raised by LTC Phillip's article warrant comment:

- ☐ The composition and role of the DISE.
- ☐ The role of the ACT.
- ☐ Brigade IEW asset management.

1. DISE. An MI battalion TOC is not a doctrinal DISE. The DISE does not provide collection assets or analytical augmentation. A DISE provides the deployed commander's intelligence staff with the communications, automated intelligence fusion, and broadcast downlink capability to execute split-based operations.

During war, the division G2 and MI battalion commander work together to develop, resource, and direct division IEW operations (to include the deployment of the DISE). They can tailor a DISE from the ACE or augment the division ready brigade ACT. The DISE deploys with the division assault command post G2 element and supports the entry force. Throughout force projection, the G2 provides the division commander the intelligence he needs to plan operations and make decisions. The MI battalion commander ensures his equipment is ready, tactically tailored, and deployed. Once sufficient follow-on assets arrive to form the division main command post (CP), the DISE can fold back into the ACE.

In operations other than war (OOTW), the DISE's life span, parent organization, and responsibilities vary based on the mission, enemy, troops, terrain and weather, and time available.

2. ACT. The ACT (part of the DS MI company) is the brigade's automated window into the division ACE. Together with the DS MI company, the ACT enhances brigade IEW support and replaces the IEW support element (which is eliminated in the A-series TOE). In an entry operation, the ACT links into the DISE at the division assault CP.

In OOTW, the ACT can execute split-based operations if reinforced with long-haul communications (normally TROJAN SPIRIT). Then it is not necessary to deploy a DISE.

3. Asset management. Normally the brigade S2 is not responsible for asset management of the DS MI company. The DS MI company commander is the asset manager for the IEW assets that directly support that brigade (organic and reinforcing).

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Element (DISE) for any information on threat activity from corps, echelons above corps, and national sensors. The DISE was formed from the MI battalion. In minutes the DISE forwarded all available information to the ACT where analysts correlated it with data from organic sensors on an All-Source Analysis System-Remote Workstation (ASAS-RWS).

The S2 overlays a finished product—a clear picture of confirmed intelligence—with his most likely enemy course of action. He forwards this picture over tactical communications to the battalion commander's combat vehicle. In his vehicle, the current force disposition is overlaid with this enemy information. After he adjusts his plan, the battalion moves forward to secure the objective. The battalion commander was able to see himself and the enemy as the operation unfolded. He was able to effectively synchronize his combat power to complete the mission.

Force XXI, the concept for the future Army, describes information as the high ground in combat operations. As the size of the Army decreases, we find ourselves less able to deploy an overwhelming force (as used so successfully in Grenada, Panama, and Iraq). The key to future Army operations is precision. We can no longer afford to waste any combat power. Each operation must maximize all available resources to inflict the maximum damage on the enemy.

The adage of applying our strength to enemy weakness is truer than ever and we cannot afford to miss an opportunity—even once. Therefore, the most important combat multiplier is providing the right information to the right decisionmaker at the right time. An organization and a system to synthesize collection from multiple sensors, tactical to national, will provide needed precision.

At the 4th Infantry Division (Mechanized) we are working to realize this idea **within the constraints of available resources.** The training that I describe is not new to the U.S. Army, but it is new to the 4th ID and its Intelligence Battlefield Operating System (BOS)—the 104th MI Battalion and G2, 4th ID.

IRONPOINT

Each year as a brigade prepares to train in the cauldron of the National Training Center (NTC), the 4th ID conducts a series of exercises. These exercises, the IRONPOINT series, provide a structure to focus brigade combat team training with all the supporting elements. The emphasis is on combat operations; we simply view the NTC rotation as the capstone training event. The IRONPOINT series provides an ideal backdrop to exercise all of the division BOS.

Emerging MI doctrine supplements FM 100-5 and provides the basis for the training event.

For the IRONPOINT exercises in July 1994, the 104th MI Battalion and the G2, 4th ID, conducted a coordinated initiative to provide imagery support to the brigade TOC. The underlying goal was to train the division intelligence elements on tactics, techniques, and procedures for intelligence support of force projection operations. The wide separation between Fort Carson and Piñon Canyon and the exercise gave us a great opportunity to test new equipment, doctrine, and concepts on support during split-based operations.

FM 100-5, Operations, describes what it takes to assemble an accurate picture of the battlefield, "...centralized direction, simultaneous action at all levels of command and timely distribution of information throughout the command." Later the Intelligence BOS is charged "...to maximize and synchronize support offered to the commander while minimizing the demands it makes on him."

Both statements set the foundation for this training event. Our goal was to take the words of **FM 100-5** and determine how to structure available resources to satisfy the doctrinal requirements they describe.

The need to provide intelligence to force projection operations is also described in existing doctrine. The challenge to rapidly deploy to one of many contingency areas and provide intelligence support en route is formidable. As **FM 100-5** states, deploying forces must derive most of its initial intelligence from national data bases and collection sources.

The training objectives were to—

- ☐ Test emerging doctrinal concepts as described in Major General Stewart's "MI Vision" briefing for intelligence support to deployed forces.
- ☐ Plan and conduct split-based intelligence operations in support of a force projection operation.
- ☐ Integrate and train on available "state-of-the-art" equipment.

Split-Based Operations

Emerging MI doctrine supplements **FM 100-5** and provides the basis for the training event. This doctrine identifies two key elements in support of force projection operations:

1. The analysis and control element (ACE)—the analytic hub of the division intelligence system.

2. The DISE—a "fly-away" team supporting split-based operations.

The DISE is a tactically tailored organization designed to meet the intelligence needs of the deploying combat commander. It may consist of collection systems, analysts, and communications systems that allow access to national intelligence collection and data bases.

To implement this doctrine and conduct an initial look at our abilities, we constructed a scenario that dovetailed into the IRON-POINT exercise. The scenario consisted of an alert for 1st Brigade to deploy to a contingency area. Bravo Company, 104th MI Battalion and a portion of the battalion TOC task organized to support this effort. We alerted all participating MI elements and conducted a 96-hour deployment exercise. Then these elements convoyed to Piñon Canyon in direct support of 1st Brigade. During this phase we experimented with our capability to provide intelligence support to a force projection operation.

We organized a provisional ACE at Fort Carson using our TROJAN CLASSIC and recently acquired Forward Area Support Terminal (FAST). These systems provided a communications path for access to national data bases and intelligence collection. We manned these systems with personnel from the 104th MI Battalion Technical Control and Analysis Element and the G2 Division TOC Support Element. This represented our first attempt to fuse these organizations into an ACE structure.

At Piñon Canyon the 104th MI Battalion TOC functioned as the DISE. The DISE performed as the intelligence asset manager for all organic sensors in theater as well as the intelligence communications focal point with the ACE. This technique proved very effective.

Our use of the MI battalion TOC as the nucleus for the DISE provides some very real benefits. It places one of the two senior MI officers in the division—the MI battalion commander—in theater with his deployed soldiers. It provides the deployed unit commander with an additional source of advice and assistance on intelligence matters. This structure helps—

- ☐ The MI battalion fulfill its doctrinal responsibility of asset management.
- ☐ Relieve the deployed S2 of that burden.

Tactical Focus

Bravo Company, 104th MI Battalion was task organized and placed in direct support of 1st Brigade. 1st Brigade actually conducted force-on-force operations against opposing forces. Combat information from the brigade collection effort was disseminated directly to the brigade TOC through the MI battalion liaison element—the Intelligence and Electronic Warfare Support Element (IEWSE).

Simultaneously, we transmitted the same information via UHF datalink to the battalion TOC. Using a TROJAN Special Purpose Intelligence Remote Integrated Terminal (SPIRIT) satellite communications system, we disseminated combat information to the ACE at Fort Carson. Information from organic collectors and national systems (only imagery) was combined, analyzed, and disseminated back to the MI battalion TOC. After a quick quality control check, analysts reformatted and sent the analyzed information to the brigade TOC. Dissemination occurred over the Mobile Subscriber Equipment (MSE) using the packet switch capability.

Access to other national products, besides imagery, would have increased the amount of intelligence, but at the cost of communications, automation, and security complexity. With the available organic sensors and automation and communications architecture, we identified imagery as our only national intelligence requirement.

Using this network we were able to provide annotated national imagery combined with signals intelligence collected at Piñon Canyon. We disseminated this intelligence to the brigade over existing tactical communications systems within three hours after collection. Of note, the combat information collected by MI battalion assets was available to the brigade S2 within minutes after collection. The brigade had the best of both worlds:

- ☐ Responsive organic collection.
- ☐ Immediately usable information.
- ☐ The ability to leverage the analytic expertise available at the division ACE.

We also experimented with the newly formed Target Acquisition and Reconnaissance Platoon (TARP) from the 4th Battalion, 4th Aviation Regiment. Using a minicamera provided with the FAST system, we were able to collect and process imagery collected by the OH-58s in the TARP. Using the FAST imagery processing capability, we were able to freeze-frame the video image, annotate it, and send the image to the 1st Brigade TOC. We moved the image over the MSE network using a tactical local area network (TACLAN). The potential for this technique is immense.

This technique starts to solve an old Army problem—how to disseminate intelligence gathered by aviation assets. In the past we have relied on pilot reports over tactical radio and debriefings after the mission. Both measures provided only limited access to the results of what are normally very lucrative reconnaissance missions. With dissemination of the imagery over a LAN, many users have access to the lucrative results.

Conclusion

We believe that this four-day demonstration showed that 4th ID can provide intelligence support to a force projection operation with minimal augmentation. It also provided some insights into the emerging MI doctrine describing both the ACE and DISE. With current resource constraints, the use of the MI battalion TOC as the foundation for the DISE—

(Continued on page 43)

Center of Gravity

by Captain Bruce Niedrauer and Captain Lisa Bennett

The concept of center of gravity is found in **FM 100-5, Operations**. Understanding this concept is critical to intelligence personnel. They must both understand and apply it to help the commander make decisions.

Identifying the center of gravity allows the commander and staff to concentrate their efforts. It helps to focus the tactical decisionmaking process and to synchronize the battlefield operating systems. This creates a single, unified effort. The concept of center of gravity streamlines decisions by tying all questions and answers to a central theme.

Synchronization

According to **FM 100-5**, the center of gravity is the—

"hub of all power and movement upon which everything depends. It is that characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or will to fight."

Both friendly and enemy units have a center of gravity. Each commander relies on the center of gravity for success. Defeating the enemy's center of gravity, in fact, defeats the enemy.

The S2 must correctly determine the enemy's center of gravity. Once identified, the friendly commander and staff can mass their efforts on this one element to defeat the enemy.

The nature of the center of gravity may vary. At the national level the center of gravity is often abstract. It may be national will and public opinion, key individuals, massed armor or artillery units, specific elite units, or air or naval power.

Furthermore, the S2 may not immediately distinguish the center of gravity. The assets that will form the center of gravity may not have formed yet.

Each echelon of a force has a distinct center of gravity. The enemy center of gravity that the commander and S2 must address involves the enemy they currently fight. For instance, a corps may fight an enemy with a center of gravity of massed artillery. The enemy's maneuver force will exploit the success of the artillery. Once they identify the center of gravity, the corps commander and staff apply their total effort to destroying the artillery.

That corps' divisions fight a "different" enemy. They fight the corps close battle and must defeat the enemy's committed maneuver forces. When an infantry company attacks an enemy platoon, the company commander must defeat the platoon. The company commander must defeat that platoon's center of gravity to defeat the enemy.

Since defeating the enemy's center of gravity means victory, we should focus all efforts to identify, acquire, and defeat the center of gravity. Collection and targeting should obviously key on the center of gravity. Through this process intelligence is synchronized with operations.

If the S2 incorrectly identifies the center of gravity, then friendly forces concentrate their efforts against another element. At best, the mistake wastes assets and at worst, it leads to defeat. Defeating something other than the enemy's center of gravity may cause the enemy to change his course of action (COA), but does not defeat him. For example, if the enemy corps commander plans to use attack helicopters during an attack, the destruction of these helicopters forces him to alter his COA.

The center of gravity does not change based on a friendly COA. A force may have to apply a different defeat mechanism in each COA, but the center of gravity remains the same.

Decisionmaking

To determine and completely understand the enemy's center of gravity (and to determine a defeat mechanism), the commander must identify key questions. These are the commander's priority intelligence requirements (PIR). Only the most critical questions become PIR. PIR that ask broad questions or focus on something other than the center of gravity divert limited assets.

The commander must meld his PIR to the concept of the operation and anticipated decisionmaking. If PIR focus on the enemy's center of gravity, the commander's decisions will now directly relate to the defeat of the enemy. The ambiguous PIR of the past no longer exist. The staff now synchronizes the commander's decisions.

During target value analysis, the S2 identifies high-value targets (HVTs). These HVTs should directly relate to the enemy's center of gravity and its associated elements. For instance, using the example of massed artillery (center of gravity), the HVTs are the artillery pieces, the fire direction control communications, the air defense artillery assets protecting the artillery, etc. During the targeting process, the targeting team nominates these HVTs as high-payoff targets (HPTs). This way, you always base your HPTs on the center of gravity.

Conclusion

By determining the enemy's center of gravity, the S2 helps focus and synchronize the commander and staff. Application of this concept allows a united effort, massed on the one element that the enemy needs to succeed. Once identified, the commander can target and defeat that center of gravity—this defeats the enemy.

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Predictive Analysis:
The Gap Between Academia and Practitioners

by Captain David T. Resch

"The nation that will insist on drawing a broad line of demarcation between the fighting man and the thinking man is liable to find its fighting done by fools and its thinking done by cowards."
—Sir William Francis Butler

A fundamental debate is taking place in the academic community concerning the prediction of events. Disciplines engaged in the debate range from quantum physics to sociology. One segment of academia states that too many variables affect events at too great a pace to allow for prediction. Another segment contends that when dealing with human variables we can predict and through predictions guide variables toward a desired end state.

The Utility of Theory

Valid doubts have surfaced about the ability of social science theory to contribute to predictions in the political environment. Practitioners explain their indifference toward academics stating that theory and research lend little value to their daily work. They say this is especially true concerning the predictability of human behavior. Mr. James Finley made this same condemnation in **Military Intelligence Professional Bulletin**[1]**:**

"In reviewing instances where intelligence has failed, we come to some obvious conclusions. Science can be of little help when dealing with the often irrational and unpredictable human mind. It is little wonder that many of the invaders of our century have been called 'madmen.' If Intelligence analysis is as much art as science, future failures are inevitable."

Our profession readily accepts this statement. A large segment of the community detests science, statistics, and theory. Many willingly accept Mr. Finley's call for more leadership education instead of the more difficult choice—scientific theory. John L. Peterson goes even further in **Defense Intelligence Journal**.[2] He equates intelligence analysis to weather forecasting:

"...as illustrated by the oft-quoted example of the flap of a butterfly wing in Brazil that interacts time after time with other events, and ultimately builds into a hurricane in the Caribbean."

He then asserts—

"The same is the case with groups of people. Very small inputs, like a comment, may be entered into the system by a single individual. If it is a rumor and the situation is ripe for it, it may grow into a compellingly powerful concept—a meme [sic]—and in a very short period of time, sweep across huge areas. Now with the international information network that is in place, such ideas can stir up a global storm in a matter of hours."

Mr. Peterson goes on to argue that complexity theory indicates the futility of predicting in a non-linear framework. Our profession gains little from continued attempts to explain how our job is nearly impossible. There comes a time when we must accept the failures of the past and confront the challenges of the Information Age. There is no more room for apologies. If too many variables exist, we must become proficient in identifying the key ones.

Mr. Peterson's article is a good read. He offers a "Vision-Based Planning" supposedly "not like any approach that Defense Intelligence or the military has used in the past." Amazingly, though, his preparing for "Wild Cards" sounds a lot like our contingency planning. His "Critical Issues" sound a lot like our decision points. His "Scenarios" sound a lot like our courses of action. We do not need to hear that what we do is futile

and then receive guidance to perform analysis like we already operate.

Analysis As An Art

There is a danger in using the "analysis is an art" approach as a sanctuary. Furthermore, there is a danger in relying on the "madmen" excuse as a refuge from science:

- ☐ World War I would have eventually occurred without the assassination of Archduke Ferdinand.
- ☐ The instability in Europe would have led to conflict without Hitler.
- ☐ The Iraqi threat will not end if Hussein disappears.

There is reason for concern over the failures of theorists in recent years.

Social science cannot read an individual's disturbed mind. However, respected historians agree that major historical events would have varied little with different actors. Many battles but few wars would have had different outcomes. Those who believe in their own Napoleonic genius should remember that Napoleon lost. If a more intelligent or less creative person had taken control of France during the revolution, the end state would have been the same. Switching Generals Robert E. Lee and "Stonewall" Jackson with Grant and Sherman would not have caused a different end state for the Civil War. The point is that you can disregard madness and genius more readily than societal, economic, or political trends (which are scientifically identifiable) in analysis.

There is reason for concern over the failures of theorists in recent years. We must examine those concerns and the more basic challenges to describe and explain the political environment. The question of the ability to distinguish between fundamental (structural) or superficial (transient) events acknowledges increasing difficulties. These are difficulties in predicting, describing, and explaining the contemporary world. It is important we attempt to understand the recent failures of social science and its efforts to reestablish its legitimacy (rather than use those difficulties to discount science).

Fundamental Change

Richard Cohen, in *"Waiting for New Meaning in a Post-Cold War World,"* **International Herald Tribune**, discusses the ability to describe and explain events since the end of the Cold War.[3] He contends that the Cold War provided a skeleton and context to examine events for relevance and validity. The blurring of right and wrong, peace and war, and friend and enemy has confused the analysis of events.

An event in Russia, Germany, or Bosnia dominates the news for a week, is labeled historic, and then shelved in favor of the next headline event. Revolutionary changes, once newsworthy for a lifetime, are now news for the week. In our smaller, fast-paced world, what seems fundamental can quickly become superficial and what seems superficial can solidify into a fundamental change. This environment means more events to stretch an analyst's time and resources. The absence of Cohen's "Cold War Skeleton" emphasizes the importance of a strong theoretical framework upon which to judge superficiality.

Our interpretation of the end of the Cold War, the collapse of the Soviet Union, and the definition of a new world order illustrate how we distinguish between fundamental and superficial change. John Gaddis and Ted Hopf shared a lively exchange last year in **International Security** concerning Gaddis's critique of science in "International Relations Theory and the End of the Cold War." The article examined the failure of theorists to analyze changes in a way that would have predicted the actual outcome.[4]

Three Approaches

Gaddis divides recent theoretical approaches into three groups to establish a framework for discussion—**behavioral, structural, and evolutionary**. He describes the approaches, Cold War predictions of noted members, and weaknesses of each approach (in analyzing events and predicting outcomes).

1. Behavioral. Gaddis categorizes J. David Singer, James Rosenau, and Karl Deutsch as behavioralists. He contends behavioralism focuses on classical empiricism. Gaddis summarized the most significant premises of behavioralists as:

- ☐ War would be less frequent and more dangerous.
- ☐ Alliances do not usually provide security.
- ☐ Preparation for war ensures peace.
- ☐ Power disparities promote peace.
- ☐ Bipolarity could or could not promote peace.

He argues the contributions were all self-evident or contradictory, and none properly described or predicted the events of the late 1980s and early 1990s. Gaddis asserts the weakness of the behavioralists is their exclusion of the unobservable and the variable of time.

2. Structural. Gaddis categorizes Kenneth Waltz, Morton Kaplan, and Stephen Rock as structuralists. He contends structuralism focuses on obscure and immeasurable structures.

Gaddis states that Kaplan and Waltz offered highly theoretical insights on the Cold War, but only Stephen Rock in **Why Peace Breaks Out** dared to offer predictions on its end. Rock's book was published in 1989; within months his four primary hypotheses were proven wrong.[5] Gaddis maintains the weakness of structuralists is the exclusion of the observable and the variable of time.

3. Evolutionary. Gaddis categorizes Paul Kennedy and Francis Fukuyama as evolutionists—Kennedy as a cyclical and Fukuyama as a linear evolutionist. He documents the evolutionists' failure by quoting Paul Kennedy's conclusion that "there was nothing to indicate the Soviet Union will ever except [sic] a peaceful decline of its empire." Gaddis claims the weakness of evolutionists is their sole focus on historical trends that blurs their predictive ability.

The Debate

Hopf contends that Gaddis unfairly criticized social science theory. Gaddis concluded that theory operates with a Newtonian view (everything has a definite conclusion that you can predict) that "hard" scientists have already abandoned. He suggests merging the more productive aspect of each approach and further suggests the chaos and complexity theory are beneficial. Hopf believes the failure to predict the end of the Cold War was a failure to ask, "How and when will the Cold War end?" For this he blames an "intellectual hegemony" of academic institutions and government agencies that prevent imaginative research.

Despite their differences, both Gaddis and Hopf echo views expressed by Yale Ferguson and Richard Mansbach in **International Studies Quarterly**.[6] They explain that we distinguish between changes and events through analysis based on our European ethnocentricity. We analyze with either a narrow, strict empiricism that misses the big picture or a broad view that misses key information.

All sides of the debate agree the field must:

- ☐ Accept more dissident perspectives. Is anyone writing about the unification of Korea?
- ☐ Overcome ethnocentricity and historical selectivity. This is a necessity because of the fundamental shift towards worldwide interdependence.
- ☐ Use a more eclectic methodology. This methodology must reconcile conflicts such as supranationalism in Europe while Margaret Thatcher attempted to derail German unification.
- ☐ Overcome the notion that scholars must choose a certain level of analysis.
- ☐ Remain open to constructive criticism.

Previously the concentration on the study of war and peace (or conflict and cooperation) stifled other ideas. Theoretically, a broader, less biased approach would have yielded more contributions to practitioners. A better approach may have cut through the euphoria of the Cold War's end and addressed Saddam Hussein (thus overcoming our ethnocentricity). Even further, the approach may have cut through the euphoria of the new "world order" and identified the Gulf War coalition as a superficiality. This realization occurred later after disappointment in Somalia and Yugoslavia. In the past we distinguished between fundamental and transient events by reacting and observing. However, is it enough to accept analysis and prediction as a reactive process?

Affecting Events

Can the field turn the tables on the difficulties of changing human behavior? Since we deal with variables (humans) that react to analysis, why not use analysis to prescribe a course. Rather than remaining reactive in analysis, the field can proactively define events as superficial or fundamental. This determination is based on whether the event guides us toward goals set by a more eclectic approach. The following are examples of planned self-fulfilling prophesies. We could—

- ☐ Label the U.S.-Japanese trade controversy superficial and lead human variables to focus on the fundamental change in trade liberalization.
- ☐ Label the Korean crisis as superficial and the destruction of nuclear weapons in the Ukraine as fundamental.
- ☐ Define the Middle East peace process as fundamental and terrorist actions as transient and superficial.

Morton Kaplan explained that while we do not have the ability to predict the individual path of a single molecule; we can predict the behavior of large numbers of molecules under certain conditions. The ability of humans to change based on certain variables may present us the ability to define, and through defining affect a course, rather than just distinguish a course.[7]

This may all sound idealistic, but some recent literature has focused on this theory. It is important that we are familiar with this theory even if we do not subscribe to it. Charles Kegley's *"The Neoidealist Moment in International Studies?"* in the **International Studies Quarterly** discusses structural change, analysis, realism, idealism, and the future of social science.[8] He asserts that we are in a period of profound change, not unlike that which took place after the Thirty Years War, Napoleon's reign, World War I, and World War II.

Kegley contends that realism was dependent on the Cold War and the Cold War only seemed to validate the realist's views. Realism dominated the other theories because of the Cold War concentration on expansion, security, and the arms race. According to Kegley, social scientists are now integrating transnational relations, regimes, integration theory, and political economy (in addition to new approaches) to distinguish and predict events. He does not call for the replacement of realism with behavioralism (a liberalist approach) but advocates a combination of the two. Kegley directly addresses the difficulties of distinguishing between long-term change and short-term variations, and the failures of traditionalists and behavioralists concerning events since 1989. He stresses the importance of trends, history, and "persistence forecasting." He assumes that the current trends of

sumes that the current trends of increased interdependence, national disintegration, influence of non-state actors, and economic internationalization will continue. Kegley argues that reliance on an unconstructed realism will hamper our abilities to predict in a broadened global agenda.

Conclusion

Social sciences have approached challenges using either too broad or narrow an approach. Individual theories used in a vacuum neglected necessary considerations. It seems scholars in the field are moving toward a more eclectic and proactive method of defining what is fundamental or superficial. This may help narrow the gap between theorists and practitioners.

It is important that we remain aware of the direction that theorists take policymakers and practitioners. The risks to the academic community (in not reaching out to us) are much less dangerous than those we face (in not utilizing all available resources). The burden of bridging the gap rests on us.

Endnotes

1. James Finley, *"Nobody Likes To Be Surprised: Intelligence Failures,"* **Military Intelligence Professional Bulletin**, January-March 1994

2. John L. Peterson, *"Forecasting: It's Not Possible,"* **Defense Intelligence Journal**, Fall 1994.

3. Richard Cohen, *"Waiting for New Meaning in a Post-Cold War World,"* **International Herald Tribune**, 23 December 1993.

4. John Gaddis and Ted Hopf, *"International Relations Theory and the End of the Cold War,"* and *"Getting the End of the Cold War Wrong,"* **International Security**, Fall 1993.

5. Stephen Rock's hypotheses were wrong following the dramatic shifts that occurred immediately after publication of his book.

6. Yale Ferguson and Richard Mansbach, *"Between Celebration and Despair: Constructive Suggestions for Future International Theory,"* **International Studies Quarterly**, December 1991.

7. A point which relates back to Mr. Peterson's article. While changing variables can greatly alter the path to a certain conclusion, most do not change the conclusion to any great extent.

8. Charles Kegley, *"The Neoidealist Moment in International Studies? Realist Myths and the New International Realities,"* **International Studies Quarterly**, Summer 1993.

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LAMP: A New Analytical Method for Prediction

by Jonathan Lockwood, Ph.D.

The Lockwood Analytical Method for Prediction (LAMP) assumes that the future is nothing more than the sum total of all interactions of "free will" (both individual and international). While not an infallible method of prediction, LAMP gives the analyst a more powerful method for organizing all available information. This method is based on the perceptions of the national actors and makes relevant predictions about which alternate future is most likely to occur at a given time.

The 12 Steps

LAMP differs from other analytical techniques because the basis of the method is determining the relative probability of a series of alternate futures, rather than determining the quantitative probability of their occurrence. The steps of the LAMP follow:

1. Determine the issue for which you will try to determine the most likely future. This is an extremely important step. If the issue is too broad, the analyst will have too many actors and courses of action to consider. This causes the number of alternate futures to explode exponentially. If the analyst vaguely defines the issue, then all analysis will end up too general in nature. This will make the analyst's subsequent comparison of alternate futures less reliable. Examples of specific issues which lend themselves to the LAMP are—

- ☐ How will the nuclear weapons issue affect relations among the four "nuclear republics" of the former Soviet Union?
- ☐ How will North Korea's emergence as a nuclear power affect nuclear proliferation in Southeast Asia?
- ☐ What is the likely involvement of Eastern European nations in the Bosnian conflict?

2. Specify the national "actors" involved. The analyst should determine the number of national actors who can directly affect the issue. For example, the four nuclear re-

publics of the former Soviet Union (Russia, Ukraine, Belarus, and Kazakhstan) are actors in the nuclear weapons issue. They are actors because they have course of actions which can directly impact any alternate future involving nuclear proliferation or armed conflict. The analyst does not include other republics within the former Soviet Union because they do not have course of actions that directly affect the future of this issue.

If the analyst has carefully limited the scope of his initial question, there should be no more than five or six actors. If there are more actors than this, the number of possible alternate futures may become unmanageable. Unless the analyst has programmed the LAMP into computer software, it will cause difficulty because of the large number of permutations that will occur.[1]

3. Perform an in-depth study of how each national actor perceives the issue. This step involves the greatest amount of historical research for the analyst, and takes the most time. The analyst should examine current history from the national actor's viewpoint and historical events, cultural factors, and even nuances of language that might impact on a nation's outlook. Failure to conduct an adequate perceptual study increases the danger that the analyst will fall into the "mirror-imaging" trap (substituting his own logic for the national actor's logic). This trap will skew the analyst's calculations when comparing the likelihood of the various alternate futures. Then all predictions are less reliable.

4. Specify all possible course of actions for each actor. After completing the perceptual study, the possible course of actions should become apparent to the analyst. The analyst should not exclude a course of action merely because it seems unlikely that an actor will choose it. However, the analyst should exclude choices that are clearly impossible or beyond the strength of the actor in question. For example, the three breakaway nuclear republics—Ukraine, Belarus, and Kazakhstan—have three general course of actions with respect to nuclear weapons:

- ☐ **Continue disarmament.** The republic in question continues the process of becoming a "nuclear-free" state. They ratify the Strategic Arms Reduction Talks (START) and Non-Proliferation Treaty (NPT) agreements and carry out their provisions.
- ☐ **Pursue independent nuclear capability.** The republic decides to acquire the technology and resources necessary to produce its own nuclear weapons and associated delivery systems independent of the former Soviet systems located in its territory.
- ☐ **Seize former Soviet nuclear weapons.** The republic decides to seize the nuclear weapons in its territory. This occurs either so the republic can establish its own independent nuclear capability or to prevent a preemptive Russian attempt to seize those weapons.

For Russia there are two options:

- ☐ **Continue disarmament.** Russia continues to work for the peaceful transfer of all nuclear weapons under its control.
- ☐ **Seize Soviet nuclear weapons within the republics.** Russia takes military action to seize control of the nuclear arsenals within one or more of the breakaway republics.

5. Determine the major scenarios within which you will compare the alternate futures. One purpose of a scenario is to provide the major assumption which will influence all national actors concerned. Often this is based on the actions of a major power outside the scope of an analyst's initial study. The other purpose, equally as important, is to give the analyst a means to limit the potential number of actors for this issue.

There are three scenarios which can occur in our breakaway nuclear republic problem. An analyst would base these scenarios on the likely future actions or conditions pertaining to our fourth nuclear republic, Russia. The scenarios are as follows:

- ☐ **Scenario I:** Russian reformist government stays in power. This scenario assumes that Yeltsin remains in power and successfully fends off the challenge of the National Salvation Front's ultranationalists. Russia will continue to pursue its goal, to unify control of the former Soviet nuclear arsenal, by diplomatic means and will not resort to military force.
- ☐ **Scenario II:** The ultranationalist government seizes power in Russia. This scenario assumes an ultranationalist course of actionlition over- throws or votes Yeltsin out of power. However, the new government does not immediately undertake military action to seize the nuclear arsenals in any of the other three nuclear republics.
- ☐ **Scenario III:** The ultranationalist government moves to seize nuclear arsenals. This scenario assumes that a Russian ultranationalist government decides that it cannot afford to wait regarding

disarmament and undertakes immediate military action to seize the nuclear weapons in one or more of the three republics.

6. Calculate the total number of permutations of possible alternate futures for each scenario. Here is where the necessity of limiting the number of actors and choices becomes apparent. The general formula for computing the number of alternate futures is $X^y=Z$. X equals the number of course of actions open to each actor and y equals the number of national actors involved (assuming that each actor has the same number of course of actions). Z equals the total number of alternate futures to compare.

For example, if an analyst looks at five actors with 2 course of actions each, then there are 2^5, or 32, alternate futures. If the analyst includes another national actor with 3 course of actions, then there are $2^5 \times 3^1$, or 96, alternate futures. However, if there were 3 course of actions open to all 5 national actors, then the number of possible alternate futures explodes to 3^5, or 243! Obviously, the use of a scenario helps the analyst keep his problem within a manageable effort.

For our nuclear republics problem, there are three national actors (the Ukraine, Belarus, and Kazakhstan) and each has three course of actions. The number of alternate futures is as follows:

- ☐ **Scenario I.** There are 3^3, or 27, possible futures which can occur under this scenario.
- ☐ **Scenario II.** There are 3^3, or 27, possible futures which can occur under this scenario.
- ☐ **Scenario III.** There are 37 possible futures which can occur under this scenario.[2] We based that number on the assumption that if Russia seizes any of the outlying nuclear arsenals it effectively preempts that republic's course of actions. However, if the analyst assumes that Russia's 2 course of actions will occur in competition with those of the other republics, then the number of alternate futures becomes $3^3 \times 2^1$, or 54.

7. Perform a pairwise comparison of all alternate futures within the scenario to determine relative probability. A pairwise comparison analyzes the alternate futures two at a time. It compares those futures exclusive of all other futures. For example, all futures within scenario I are numbered 1 through 27. Future 1 is compared to future 2. Based on all of the analyst's information at that moment, whichever future the analyst deems "more likely" is given one vote. The analyst then compares future 1 to future 3, and all of the other futures within the scenario, one at a time. After the analyst compares and votes on the last possible pair of futures, 26 and 27, he repeats this process for the other scenarios.

The number of alternate futures for analysis determines the number of votes. This in turn is a function of the number of actors and course of actions for this issue. The formula for the number of pairwise comparisons is $X = (n-1)+(n-2)...+(n-n)$.

In this equation n equals the total number of alternate futures for analysis and X equals the total number of pairwise comparisons.[3] The number of pairwise comparisons on the four scenarios within **The Russian View of U.S. Strategy** would be $X=(4-1)+(4-2)+(4-3)+(4-4)=3+2+1=6$.

However, as we increase the number of actors and course of actions, the size of the problem can quickly become unmanageable without either computer support or a decision (by the analyst) to limit the scope of his analysis. For our issue, the number of pairwise comparisons for scenario I and II is 26 + 25 + 24...+ 1, or 351 votes each. For scenario III, if we assume 37 alternate futures, the number of pairwise comparisons required is 666. If we assume there are 54 alternate futures, the number of comparisons mushroom to 1485![4]

As the analyst proceeds through the pairwise comparison, he will discover that some pairs are easier to vote on than others. For example, the analyst may conclude (based on the perceptual study) under scenario I that futures in which Belarus continues disarmament are more likely than it developing an independent nuclear capability. (Even less likely is a future where Belarus seizes the nuclear weapons.) The analyst soon confronts these alternate futures:

Future S: Ukraine continues disarmament, Belarus seizes nuclear weapons, Kazakhstan seizes nuclear weapons.

Future T: Ukraine continues disarmament, Belarus seizes nuclear weapons, Kazakhstan develops independent nuclear capability.

These two alternate futures are clearly among the most bizarre possible futures, since current evidence indicates virtually no likelihood of Belarus seizing nuclear weapons. However, the problem is not all that difficult since both futures assume identical course of actions for Ukraine and Belarus. The only real difference in these futures is whether Kazakhstan develops independent nuclear capability or seizes the nuclear weapons. In this instance, the analyst is able to choose future S as "more likely" than future T, even though both have a low probability.

The analyst will also have a relatively easy time comparing alternate futures that are at opposite ends of the scale of relative probability, such as the following:

Future X: Ukraine pursues independent nuclear capability, Belarus continues disarmament, Kazakhstan continues disarmament.

Future Y: Ukraine continues disarmament, Belarus seizes nuclear weapons, Kazakhstan seizes nuclear weapons.

Here the choice of future X over future Y is much easier. There are no common course of actions in either future. This occurred because of the analyst's perceptual study prior to the vote. The analyst decided a future in which Ukraine pursues independent nuclear capability is certainly more plausible than a future in which both Belarus and Kazakhstan seize their respective nuclear weapons.

8. Rank the alternate futures for each scenario from highest relative probability to the lowest based on the number of votes. After pairwise comparison you have a series of futures with dif-

ferent numbers of votes based upon their relative probability to each other. The analyst then rank-orders the futures from most likely to least likely.

9. Assume that each future will occur, analyze each alternate future in terms of its consequences for the issue in question. This step requires some of the analyst's imagination. He must write a "future history" (things that might be) where the national actors take the course of actions of a particular alternate future. In the example of the nuclear republics, the analyst summarizes each of the alternate futures in a separate section which answers the following question: What are the consequences of this particular future for arms control, nuclear nonproliferation, and the likelihood of armed conflict? Depending on the prediction issue and the degree of research the analyst undertakes, the analysis of a given alternate future often takes more than one or two paragraphs.

10. State the potential of a given alternate future to transpose into another alternate future. The concept of transposition is familiar to chess players and fans as it pertains to chess openings. Transposition occurs when one chess opening's line of play leads into one resembling a different chess opening. The same thing occurs in our array of alternate futures. Since every act of "free will" changes the future, it has virtually the same result as transposition does in chess. Once the analyst describes the consequences of an alternate future, he should note its potential for transposition into another alternate future. This may affect the relative probability of these futures.

11. Determine the focal events that must occur in our present in order to bring about a given alternate future. The analyst does not address this step in the consequences paragraph while thoroughly examining the consequences of an alternate future (in step 9) and its potential for transposition (in step 10). A focal event is an occurrence of such sufficient magnitude that it changes the relative probability of alternate futures. If we were to "draw a line" in time from our present into the future, a focal event would resemble an intersection with two or more branches into other futures. Once a national actor takes a path, the analyst soon confronts a different array of possible futures and points that branch off. The most likely future has the fewest focal events leading into it. It is the alternate future that offers the line of least resistance. In fact, our present might resemble that alternate future so closely that no focal events need to occur.

On the other hand, the more bizarre futures have more focal events leading to them. This occurs because it requires more of these events to change our present into those futures. For the analyst, these alternate futures receive the fewest votes during pairwise comparison (in step 7).

12. Develop indicators for the focal events. The final step, this step links the LAMP technique with the more traditional indications and warning function. For each focal event associated with an alternate future, the analyst should develop a list of indicators. These identify that the event either occurred or is about to occur. The analyst completes the 12-step LAMP process once he enters the indicators into an automated data base along with the focal events and alternate futures. Subsequent activity consists of periodic "revoting" of the alternate futures as he acquires new information, refinement of the indicators associated with particular focal events, and the identification of additional focal events for the more exotic alternate futures.

Conclusion

The intent of this article is to illustrate a new way to think about predictive analysis in strategic and possibly tactical intelligence. LAMP obviously will not grant the gift of prophecy. However, with judicious application, the LAMP offers a powerful and logical method for illuminating the future's many possibilities.[5]

Endnotes

1. Although LAMP is not yet available in computer software, we developed and tested prototype software. The software will allow analysts to handle more complex problems and groups of analysts can use LAMP simultaneously.

2. The difficulty with this assumption is that it complicates the calculation of the number of alternate futures. For ease of analysis, it is usually better to assume one country's course of action is simultaneously in competition with another country's course of action.

3. Although the analyst will leave off the *n-n* calculation, it is shown as part of the general formula.

4. For my thesis, I manually performed pairwise comparison for all three scenarios with index cards (comparing 91 futures and 1,368 pairwise comparisons).

5. See the Fall 1994 issue of **Defense Intelligence Journal** for more detail.

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Assessing Intelligence Support

by Captain Gary M. Kraak

The commander drives intelligence but how well does intelligence support the commander? Measuring Intelligence Unit Effectiveness (MIUE) is a tool to determine this effectiveness. The U.S. Army Research Laboratory (ARL), Fort Huachuca developed this process. Intelligence users can identify how well an intelligence staff and unit met their requirements.

MIUE increases the command's effectiveness through a better intelligence flow and requirements understanding. In addition, MIUE fosters team building with the exchange of requirements and assessments. You can use MIUE in a field training exercise, command post exercise, or actual operation.

MIUE Requirements

The MIUE process uses a series of questionnaires and forms. One questionnaire is used to specify intelligence needs. A second questionnaire is given to quantifies the effectiveness of intelligence production. Intelligence consumers, known as observer-participants, complete the questionnaires. In a division these could include the G3 operations and plans, fire support, targeting, and division airspace management sections. A diagnostician, who will analyze the data, uses three additional forms.

The diagnostician must familiarize himself with the G2 section and have experience in intelligence operations and doctrine. This process requires only one diagnostician and as many observer-participants as you deem necessary. This makes MIUE a "low overhead tool" and keeps all analysis within the division. To train everyone, we recommend eight hours. The training goal is to ensure everyone knows what questionnaires and forms to use, and when and how to use them. This assures accurate and fast completion of MIUE during an exercise.

MIUE is an eight-step procedure.

1. Identify and rank information requirements. Information requirements (IR) form the basis to assess intelligence effectiveness. The **IR profile** (Figure 1) asks the intelligence user to state and weight these requirements. These weights produce an information requirements profile. This profile helps command effectiveness. It tells the intelligence staff what is important and how important it is.

There are four major categories in the profile:

- ☐ Battlefield area.
- ☐ Enemy situation.
- ☐ Enemy courses of action.
- ☐ Operations security (OPSEC).

Each major section contains subsections. Interviews with warfighters provides the information items in the requirement's profile. Each observer-participant weights the information requirement according to his needs. Weights range from 100 for the most important to 0 for those you do not use. The weights will help determine how well intelligence has met the user's needs during the evaluation procedure. The weights also assist in setting priorities for diagnosing the information production function. The 4th Infantry Division suggested adding the "special notes" column to call attention to specific events (e.g., wind speed between 0400 and 0600).

2. Determine standards for the information. Next, the observer-participant determines

INFORMATION REQUIREMENTS PROFILE

INSTRUCTIONS:

1. Assign zero to any information items you do not want.
2. Assign 100 to your most important information items.
3. Assign a number between 0 and 100 to remaining items to reflect the relative importance of the item.
4. List specific data items you want emphasized under special notes

NAME _____

POSITION _____

DATE _____

		IMPORTANCE WEIGHT (0 - 100)	SPECIAL NOTES
BATTLEFIELD AREA	*Weather*		
	Weather situation	70	
	Weather effects on EN	60	
	Weather effects on FR	50	
	Terrain		
	Terrain situation	80	
	Terrain effects on EN	70	
	Terrain effects on FR	60	
	Battlefield area conditions		
	Existing battlefield conditions	90	
	Effects on EN operations	80	
	Effects on FR operations	70	
SITUATION	*EN Disposition and composition*		
	Forward trace	100 90	
	Unit locations	100 90	
	Main efforts	100 70	
	Combat support	60	
	Echelonment	50	
	Reserves	70	
	Staging areas	60	
	Combat service support	60	
	Air Forces	20	
	C2	80	
	Strength of EN forces by echelon		
	Readiness by echelon	80	
	by status by echel	60	

Figure 1. Information Requirements Profile.

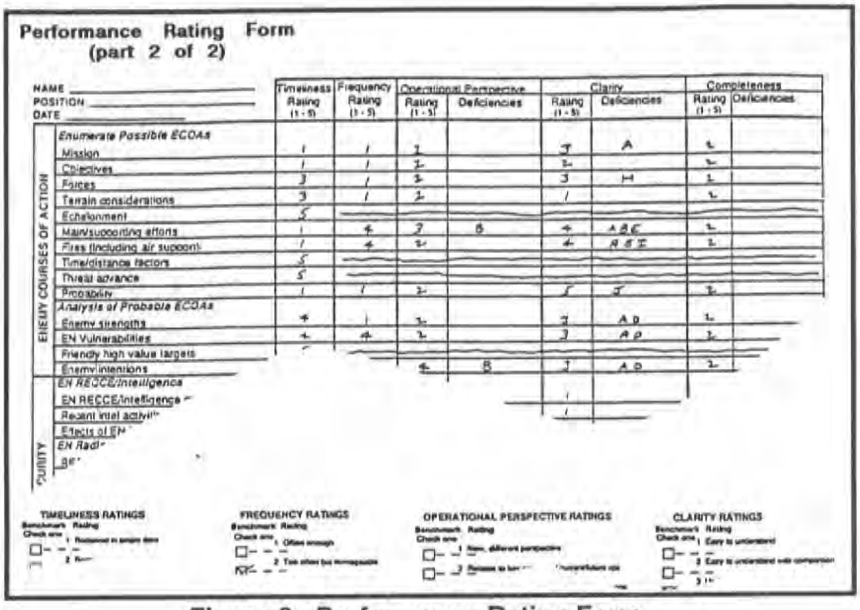

Figure 2. Performance Rating Form.

standards he will use to evaluate the intelligence he receives. He does this by identifying, on a series of scales, the point where information is not useful. This point defines a benchmark to later determine effectiveness. There are five dimensions used to evaluate information:

- ☐ Timeliness: a measure of whether the user received the information in time to take action.
- ☐ Frequency: a measure of how often intelligence personnel need to provide information to a user.
- ☐ Operational perspective: a measure of how well intelligence personnel put the information in the context of current or future operations.
- ☐ Clarity: a measure of how easily the user can grasp and follow the content of the information.
- ☐ Completeness: a measure of the factual content of the information.

3. Rating the information received. The **performance rating form** (Figure 2) records the intelligence unit's performance in the five dimensions. Column one records the timeliness or nonreceipt of each information item (with a value of one through five). Next, the observer-participant logs the frequency of responses to each item, then the operational perspective ratings in the same manner he recorded timeliness. In addition to a value for operational effectiveness, the form captures deficiencies (either as a coded deficiency or a brief description). The observer-participant then rates clarity and completeness in the same manner he rated operational effectiveness.

This procedure is fast and effective. One hour is ample time to complete the ratings although the time will vary depending on the amount of information, the number of deficiencies, and the experience of the observer-participant. The more you use this process, the less time it takes to finish the ratings.

4. Analyze the ratings. The observer-participant ratings are the basis for the diagnostic plan. This plan finds the cause of the intelligence deficiencies. Ratings also provide the basis for the feedback to the commander and G2 or S2—they are the backbone of the evaluation procedure.

Common sense and an understanding of the unit's goals are the critical elements of successful diagnosis. There are two phases of the diagnosis. Analyze the combined deficiency data from the consolidated observer-participant rating. Then develop an inquiry strategy to conduct the diagnosis. Diagnosis involves actually gathering data, performing data analysis, and recording the findings.

The **deficiency consolidation worksheet** (Figure 3) provides a means to rapidly record data from the various rating forms. This visually displays how the deficiencies cluster. There are four differ-

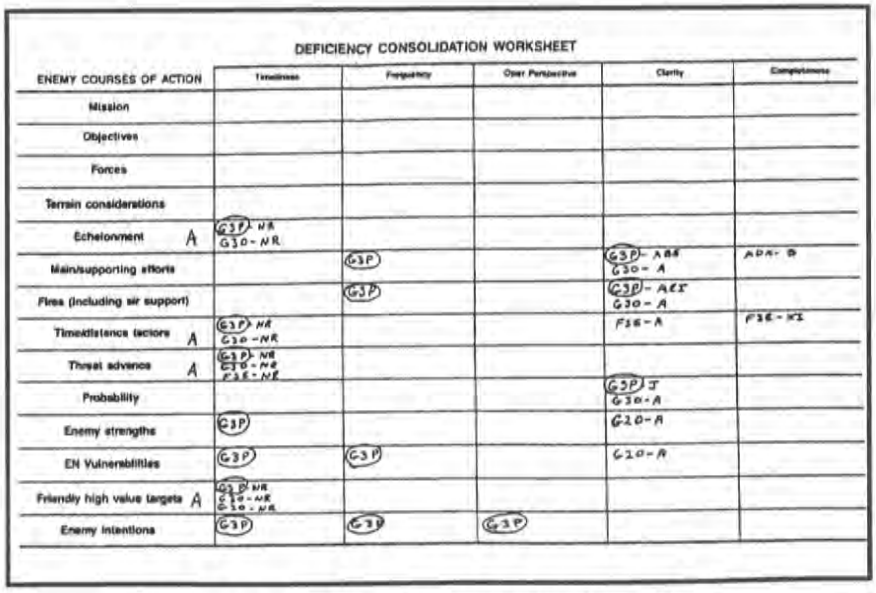

Figure 3. Deficiency Consolidation Worksheet.

PLANNED INQUIRY GUIDE

Deficiency or Areas to Diagnose	Potential Causes	Where to Start	Question Which Must Be Answered
1. Timely submission of HPT info items (FSE).	Do we know what FSE wants and in what time?	G2 OPS	DQI — Timeliness. Was info sent? If yes, stay in G2 Ops and run timeliness section of DQI. If no, go to CM&D and start checking at Question 3.
2. Incomplete info item, friendly vulnerability to all users.	New analyst assigned to OPSEC.	ASPS	DQI - Completeness. Were missing facts available? If yes, stay in ASPS. If no, go to CM&D and start checking using Question 1, Deficiency Area 5, Completeness.
3. Weather effects info items as sent to ADA deficient in Freq, Ops Per, Clarity, and Comp.	Check SOP on ADA reporting Cycle	SWO	DQI - Frequency. How frequently does user need it? OPS Per is, does Intel have guide to ADA context? Others were facts available.

Additional comments:
1. G2OPS really busy past 24 hrs. could be isolated instance of overload. See if Ops asked for help.
2. Is new analyst being supervised?
3. Big breakdown with ADA. Could use planning session. Determine who knows ADA best.

Figure 4. Planned Inquiry Guide.

ent worksheets, one for each of the four major information categories (battlefield area, enemy situation, enemy courses of action, and OPSEC).

5. Determine where deficiencies might have occurred. A deficient item is one that falls below the observer-participant's benchmark. The diagnostician records in the appropriate cell of the consolidation worksheet the duty position of the observer-participant. For the timeliness dimension, the observer-participant records the timeliness or nonreceipt of the item. This worksheet presents a clustering of the deficiencies. From the exercise objectives and deficiency clustering, the diagnostician can evaluate deficiencies and set diagnostic priorities. Each cell represents a cluster of deficiencies. Read down the deficiency column to see how often the specific deficiency occurred. Then read across the item row to see how often that specific item was deficient. Look within the cells to see the position that has problems.

6. Develop a diagnostic plan. Now you can develop the plan to collect the data necessary to diagnosis the deficiencies. This includes deciding—

- ☐ Where to go to collect the data.
- ☐ What questions the diagnostician needs to answer.
- ☐ How to get the answers and record the data after the inquiry.

A diagnostic **planned inquiry guide** (Figure 4) helps to organize the inquiry strategy. In the "deficiency or areas to diagnose" column, the diagnostician should enter the deficient areas he will evaluate. He then prioritizes the information from the deficiency consolidation worksheet and completes the potential causes column. The diagnostician may have some ideas on why the deficiencies occurred because of previous experience and may want to note some things to check in this column.

7. Diagnose the intelligence information processing system. The types of deficiencies and the diagnostician's experience are the major factors to define a place to start. The **information item deficiency to source matrix** (Figure 5) is also an aid. In the left column of this matrix are the major categories of information items. Across the top are the types of deficiencies. We recommend the inquiry start within the cell.

To determine the cause of the deficiencies, the diagnostician must use the observed information deficiencies. The diagnostician uses a **diagnostic question inventory** that contains sequenced questions, organized by type of deficiency. The question inventory only serves as a guide, it is not comprehensive. Besides the questions, the diagnostician should consider how to find the answer. There is considerable flexibility in obtaining answers. The diagnostician may conduct interviews with individuals in the intelligence production system, observe procedures and production flow, review documents, or any combination of these. Then the diagnostician continues answering questions until he finds out the deficiency's cause.

Planning and conducting the inquiry takes time. It is done while the exercise is in progress. Those involved must use tact and not disrupt the exercise. Because the diagnostics are under a time constraint, diagnose only the most critical deficiencies during the exercise.

8. Provide feedback. The diagnostician gives feedback to the commander and G2 or S2 on how well intelligence met the needs of the command. The best source of

(Continued on page 47)

INFORMATION ITEM DEFICIENCY TO SOURCE MATRIX

Information Item Category	Items Omitted	Poor Quality Items		
	Timeliness/ Frequency	Operational Perspective	Clarity	Completeness
BATTLEFIELD AREA	G2 Ops	G2	ASPS	G2 Ops
Weather	USAF WO	G2	G2 Ops	G2 Ops
Terrain	ENG TM	G2	ASPS	
Area conditions	ASPS	G2	ASPS	
ENSIT	G2 Ops	G2	G2 Ops	
Disposition & Comb.	G2 Ops/CM&D	G2	G2 Ops	
Strength	G2 Ops/CM&D	G2	G2 Ops	
Activities	G2 Ops/CM&D	G2	G2 Ops	
ENCOAS	ASPS	G2	ASPS	
Possible COAs	ASPS	G2	ASPS	
Other info on Poss. COAs	ASPS/CM&D	G2	ASPS	
OPSEC	G2/CI TEAM	G2	G2 Ops	
EN Reconnint	ASPS/CM&D	G2	ASPS/G2 Ops	
EN REC	ASPS/CM&D	G2	ASPS/G2 Ops	
EN Special Ops	ASPS/CM&D	G2	ASPS/G2 Ops	
FR Vulnerabilities	G2/ASPS	G2	ASPS/G2 Ops	
Deception	G2/ASPS	G2	ASPS/G2 Ops	

UNIT SPECIFIC COMMENTS:

Figure 5. Information Item Deficiency to Source Matrix.

Intelligence in the Philippines

by Captain Michael E. Bigelow

During World War II, General of the Army Douglas MacArthur and his Allied forces fought a series of grueling campaigns in the Southwest Pacific Area (SWPA). These campaigns culminated with the January 1945 invasion of Luzon in the Philippine Islands. Landing along Luzon's northern coast, General Walter Krueger's Sixth Army fought the largest American ground campaign of the Pacific War. Although Sixth Army liberated Manila after two months, the campaign continued until the end of the war. By the time the Luzon campaign ended, it had cost 200,000 Japanese lives and 47,000 American casualties.

In this hard-fought campaign, the performance of Army intelligence was inconsistent. Although the Sixth Army's initial intelligence estimate was remarkably accurate, the theater G2 seriously underestimated the Japanese strength on Luzon. During subsequent fighting, American intelligence tended to misjudge Japanese numbers and intentions. This occurred partly because the American collection effort was unbalanced. Human intelligence (HUMINT) took center stage, while signals intelligence (SIGINT) and imagery intelligence (IMINT) stood in the wings. Additionally, as the campaign dragged on, a gap developed between operational and tactical level intelligence. Consequently, American tactical commanders often had to discover for themselves what enemy forces were over the next hill.

The G2s

In early 1942, intelligence equipment or agencies did not exist in the SWPA. However, by the Luzon campaign, theater and army level G2 sections had evolved into mature staffs. With two years of combat experience, both G2 sections had parallel organizations. Both theater and army had a section to conduct day-to-day intelligence operations. These sections prepared daily and weekly reports, posted situation maps, and worked closely with order of battle teams. Meanwhile, plans groups developed estimates and studies for operational plans. Both the theater and army G2 sections had photographic, topographic, and language specialists. At corps and division level, the G2 sections had a similar, although austere, structure.

To help prepare for the return to the Philippines, the SWPA G2 established the Philippine Section. After February 1944, this section acted as a miniature G2 for intelligence specifically on the Philippines. By spring 1944, it prepared monthly, weekly, and daily intelligence reports. The G2, Sixth Army, did not develop a Luzon planning cell until September 1944. That fall the cell performed many of the same functions as its theater counterpart.[1]

Major General Charles Willoughby was MacArthur's G2. Physically imposing with a hot temper, Willoughby had served with MacArthur since the beginning of the war. Although talented and intelligent, Willoughby was also egotistical and resented any interference in his domain. Willoughby's resentment was "the Achilles' heel of the SWPA intelligence structure." It led to quarrels between Willoughby and his subordinates when he thought they were encroaching or working against his plans. As a G2, Willoughby was always either impressively correct or hopelessly incorrect. Unfortunately, Willoughby was hopelessly incorrect during the Luzon campaign.

Colonel Horton White was Major General Willoughby's counterpart at Sixth Army. Like Willoughby, Colonel White was a big man, easily identified at Sixth Army headquarters. However, White was a quiet and good-natured staff officer, unlike Willoughby. He had a reputation for competence and ability. In January 1945, White orchestrated the highly successful rescue of prisoners of war from the Japanese compound at Cabanatuan. During the Luzon campaign, the Sixth Army G2 presented his commander a much more accurate enemy situation than Willoughby gave MacArthur.[2]

The Sources

During the Luzon campaign, intelligence from a variety of sources flooded MacArthur's forces. Intelligence staffs, especially at lower levels, relied overwhelmingly on information from captured documents and prisoners. SIGINT, IMINT, and other HUMINT supplemented this infor-

mation. So much data reached the G2s, that they faced a mind-numbing task to collate and evaluate it all. Worse, most of the information was contradictory and confusing.

At theater level, the SWPA G2 controlled three collection and analytical agencies:

1. The Allied Translator and Interpreter Section (ATIS). This agency was the most important of the three agencies. During the war, ATIS linguists translated over 20 million pages of captured documents and interrogated 14,000 prisoners. The ATIS attached many of its linguists to army, corps, and division G2s, where they provided invaluable combat information to front-line commanders.

2. The Central Bureau. Sometimes called MacArthur's greatest intelligence asset, the Central Bureau was the SWPA's SIGINT agency. By 1943, the bureau usually provided MacArthur detailed intelligence of enemy strength and intentions—this was especially true after January 1944. This allowed MacArthur to bypass strongly defended areas and destroy reinforcement convoys—isolating his enemy. On Luzon, however, SIGINT would make a poor showing.

3. The Allied Intelligence Bureau (AIB). The AIB collected intelligence through clandestine and special operations and supported guerrilla movements in the Philippines. These guerrilla groups provided vast, if sometimes unreliable, amounts of information during the planning and execution of the Luzon campaign.[3]

At army, corps, and division levels, captured documents and prisoners were the primary sources of information. Lieutenant Colonel Downey, G2, 33d Infantry Division, estimated, "About 75% of our enemy information is obtained from captured documents and PWs." The G2, I Corps added: "Our knowledge of enemy strength and disposition, his ability to reinforce, and the extent of his casualties came principally from the systematic study of information from these sources." Colonel White's staff echoed these comments.

Other HUMINT sources also played an important role in operations on Luzon. Corps and divisions had ground reconnaissance troops, while Sixth Army had its effective Alamo Scouts. *(See bookreview on page 56.)* General Krueger formed this all-volunteer reconnaissance group to provide long-range ground intelligence. This specially trained unit worked directly for Colonel White and proved of "inestimable value to the Sixth Army." Almost half of the scouts' missions were in support of the Luzon campaign.

Neither IMINT nor SIGINT proved as useful as HUMINT to the G2s in Sixth Army. Compared to the European Theater, use of aerial photography in the SWPA developed slowly. It was not until the Philippines campaigns that photo interpreters provided direct support to ground troops. As a result, Sixth Army's IMINT system experienced growing pains on Luzon. Even so, more than 700,000 photographs provided helpful intelligence on fixed Japanese emplacements.

In 1944, the Central Bureau was intercepting and solving an impressive array of Japanese codes. However, it never broke the regimental codes and thus could not reveal enemy tactical disposition. As one corps G2 noted, "Radio monitoring...was not particularly successful from the Corps point of view." Even at army level, SIGINT was not beneficial. Colonel Clyde Eddleman, Krueger's G3, stated that SIGINT was "of little value to the Sixth Army directly. It gave some indication of Japanese morale but little else."[4]

Intelligence Estimates

The G2s began detailed planning for the Luzon operation in October 1944. They collected information and translated it into intelligence; and disseminated it as estimates, studies, and situation maps. The most important deficiency was the void concerning the strength and composition of the Japanese garrison. This involved determining what portion of the reinforcing units had reached the island, since virtually every convoy was subjected to air or submarine attacks. Neither aerial reconnaissance nor radio intelligence (normally the best long-range intelligence source) provided many pieces of the puzzle.

The Central Bureau's SIGINT often included convoy information, but did not include cargo estimates or casualty estimates from Allied attacks. Sometimes SIGINT would miss a division's movement altogether. The theater's IMINT

system often failed to disseminate photographs to the lower units. As a result, the G2s had to rely on the vast amounts of often undependable information from the Filipino guerrillas. These uneven sources led to two divergent estimates of the situation.[5]

In mid-October 1944, Willoughby estimated that 121,000 Japanese defended Luzon. Acknowledging that the Japanese would reinforce the island, he believed they would defend along Lingayen Gulf, then in succeeding positions down Luzon's Central Plain (the main approach to Manila). Throughout November and December, Willoughby increased his estimate of the garrison's strength. On 1 December, SIGINT told him at least 153,500 Japanese defended the island. Increasing that estimate to 172,400, Willoughby continued to believe that the Japanese would defend Lingayen Gulf and the Central Plain. He also predicted that a large force to the east and southeast of the Lingayen Gulf would try to threaten the beachhead and Sixth Army's left flank as it advanced to Manila.[6]

Willoughby's estimate woefully underestimated the number of Japanese defenders. General Yamashita Tomoyuki, the capable commander of the Japanese 14th Area Army on Luzon, had more than 275,000 troops. Many of his units had only recently been turned into combat units; they were inadequately trained and poorly equipped. Yamashita also faced supply and transportation problems. Yet the Japanese general had "a respectable force," as the official American historian noted, "and one that was far stronger than General Willoughby...had estimated."

Willoughby also failed to correctly predict Yamashita's intentions. Recognizing his transportation problems, Yamashita never planned to fight a battle of maneuver on the Central Plain. Instead, he planned to fight a static defense that would tie down as many American troops as possible. To accomplish this delaying action, he divided his army into three groups and withdrew them to mountain strongholds. The *KEMBU* Group (about 30,000 troops) defended west of the Central Plain. The *SHIMBU* Group (80,000 troops) defended the mountains to the east of Manila. The largest concentration, the *SHOBU* Group (152,000 troops) defended the mountains of northern Luzon. With these three groups, Yamashita would fight an effective seven-and-a-half-month delaying action.[7]

Colonel White's estimate of early December 1944 was significantly more accurate than Willoughby's. White estimated that Yamashita had 234,500 troops on Luzon (as opposed to Willoughby's low estimate of 172,400). White also estimated that almost 160,000 of these troops were north of Manila in a large concentration—50,000 more than Willoughby—on the American left flank. Although White noted the lack of experience and training among the Japanese units, he (like the SWPA G2) erred by predicting that Yamashita would try to defend the Central Plain.[8]

The numerical disparity in Willoughby's and White's estimates came from differing evaluation of the data rather than the data itself. Willoughby had taken fragmented information at face value; as a result, he overlooked large numbers of unattached and service troops. Counting only the larger units, the SWPA G2 missed over 230 separate Imperial Army units. White, on the other hand, accounted for both unidentified and service troops.

The Japanese had successfully moved several divisions from Manchuria to the Philippines undetected. White wisely believed that the Luzon garrison had more units than just the identified divisions and brigades. Using reliable HUMINT reports of large troop concentrations and movement, he estimated that Central Luzon had 51,000 Japanese combat troops. To factor in base defense and service personnel, the Sixth Army G2 multiplied the number of combat soldiers by 1.5, giving him a total of 76,500 soldiers. The result was a reasonably accurate count of Japanese on Luzon.[9]

The Drive Toward Manila

White's and Willoughby's fears of strongly defended beaches quickly ended when Sixth Army landed virtually unopposed. On the army's right, XIV Corps drove south toward Clark Field and Manila; on the left, I Corps protected the eastern flank. At first, both corps made good progress. Then resistance from the *SHOBU* group stalled I Corps. This meant that as XIV Corps advanced, it exposed its flank.

As the corps pushed east and south, Sixth Army intelligence began to determine the enemy situation. The Americans could not depend on SIGINT to outline the Japanese tactical situation. They did, however, receive good data from IMINT, after some initial problems. Information from prisoners and captured documents still remained the most useful source of information. From this information, the G2 staffs thought the Japanese had withdrawn as a ruse to cause XIV Corps to overextend its flank—making it vulnerable to counterattack. Fearing this scenario, General Krueger stopped XIV Corps until he could strengthen I Corps and clear the Japanese from their threatened areas.[10]

But General MacArthur had his own plans. He wanted to take Manila quickly. MacArthur also wanted the all-weather runways of Clark Field. During mid-January, Willoughby only strengthened his commander's resolve. The G2 estimated that at most there was only about 130,000 troops left on Luzon. He also ruled out a last-ditch defense of Manila. With his G2's low estimate of enemy strength, it is not surprising that the SWPA commander brushed aside Krueger's fear of a Japanese counterattack. MacArthur tried to bully Krueger into pushing XIV Corps to seize Manila. Krueger resisted the pressure.

Meanwhile, Colonel White revised his earlier estimate. With weak resistance on I Corps' right flank and in front of XIV Corps, White figured out the true pattern of Japanese defenses. He was convinced that Yamashita would not defend the Central Plain. The only strong enemy force now on the plain was the 2d Tank Division, which he correctly analyzed was retreating northward. On 18 January, Krueger ordered the XIV Corps south toward Clark Field.[11]

Central Luzon

As the XIV Corps raced south, the Sixth Army G2 developed a more accurate picture of the Japanese who faced them. In a captured operations order, they learned of the *SHIMBU* Group and its area of responsibility. To the four previously identified enemy divisions (2d Tank, 8th, 103d, and 105th), the G2 added the three remaining divisions (10th, 19th, and 23d); general locations for five of the seven divisions. But the situation became vague as XIV Corps approached Clark Field.

It was obvious that the Japanese would defend Clark Field in some way. But neither Willoughby nor White had much information on Japanese strength or intentions. Intelligence staffs estimated that between 4,000 and 8,000 troops, mostly service personnel, defended the area. The XIV Corps G2 believed the Japanese would only offer a minor delaying action. In fact, the Americans faced 30,000 troops from the *KEMBU* Group. While this group lacked combat training and heavy weapons it fought a stubborn, week-long defense of the field. Unfortunately for the American infantrymen, their corps and divisional G2s could not outline the enemy's defenses until after they launched their attacks. Once the Allies secured Clark Field on 2 February, Krueger could continue his dash towards Manila.[12]

Similar to the *KEMBU* Group's defense of Clark Field, the determined defense of Manila also caught the American forces off guard. Intelligence sources did not help. Reports were so contradictory that they were useless for tactical planning. MacArthur and Krueger even disagreed on whether the Japanese would defend Manila. As late as 15 January, Willoughby, like his commander, did not think the Japanese would defend the city. Although the Sixth Army G2 disagreed, his intelligence on the enemy's disposition and size was meager. Instead of an easy operation like MacArthur envisioned, the battle for Manila became a month-long, house-to-house ordeal that ended on 4 March 1945.[13]

But the liberation of Manila didn't mark the end of the Luzon campaign. Krueger turned his forces to face the *SHIMBU* Group, and they fought in the mountains east of Manila for the next three months. During these operations, faulty intelligence sent one of Krueger's corps on a "wild goose chase." The *SHIMBU* Group controlled some vital facilities for Manila's water supplies. MacArthur concluded, based on G2 data, that the Wawa and Ipo Dams were critical, and ordered Krueger to take them. Since Wawa Dam was closer, Krueger ordered its seizure first.

Unfortunately, the population of Luzon had not used these dams as a source of water since 1938. The XIV Corps (then later the XI Corps) plunged into the extremely rugged jungles of the Sierra Madre Mountains and fought a very slow and costly campaign.

To make matters much worse, all of the estimates continually underestimated the strength of the Japanese. By the end of May, the Americans had secured both dams and broken the back of the *SHIMBU* Group.[14]

Northern Luzon

As the fighting began to subside in central and southern Luzon, Krueger's I Corps prepared to move against the *SHOBU* Group. By mid-February, it had gained footholds on the three highways running into the mountains of northern Luzon. There, Yamashita waited with a force that outnumbered I Corps two-to-one. He deployed his force in a triangular redoubt with its apexes at Bambang, Bagiouo, and Bontoc. Krueger knew time was on the enemy's side. The longer he waited to attack, the more time the Japanese would have to dig into already superb defensive terrain.

Good intelligence partly compensated for I Corps' unfavorable troop ratio. Although underestimating the *SHOBU* Group's strength, the Sixth Army G2 presented a sound estimate of enemy dispositions. Using guerrilla reports, captured documents, and aerial reconnaissance, Colonel White and his staff defined Yamashita's triangular defensive disposition with a rough composition. They also uncovered an important supply line that linked the Japanese defenses. But discovering enemy positions and taking advantage of that knowledge were two different things. Krueger's soldiers still had to fight a determined and well-positioned enemy with a capable leader. It wasn't until the war's end that Yamashita finally surrendered.[15]

Conclusion

One of MacArthur's greatest advantages over the Japanese was his intelligence system. In 1943 and 1944, it helped him seize and maintain the initiative with relatively weak forces. With superior intelligence, he could bypass strong defenses, hit the Japanese at their weakest points, and achieve overwhelming local superiority. But if intelligence served him so well in prior campaigns, why did it perform so inconsistently on Luzon?

Part of the answer obviously involves the SWPA G2. MacArthur believed Willoughby's greatest asset was his unquestioning loyalty. With MacArthur's obsessive desire to return to the Philippines, one has to wonder if Willoughby let this loyalty cloud his judgment and analysis. Did he make the intelligence prove his commander's estimates?

While Colonel White put seemingly discordant pieces of information together into a coherent whole, Willoughby did not. Willoughby's failure caused inaccurate and fragmented estimates. Lacking flexibility, Willoughby never acknowledged that his original enemy strength estimate was too low. Therefore, he consistently underestimated the Japanese strength. While the theater G2's estimates cast long, dark shadows, he was not the largest problem the intelligence community faced on Luzon.

On Luzon, the SWPA intelligence system lacked consistent long-range collection assets. In World War II, these were aerial reconnaissance and radio intelligence. Yet, in early 1945, the intelligence staffs had only started perfecting IMINT in the SWPA. Worse, SIGINT, which had provided much operational intelligence in past campaigns, performed unsatisfactorily on Luzon.

With little or no SIGINT and limited IMINT, intelligence staffs enthusiastically embraced HUMINT sources. Captured documents and prisoners gave them excellent information. But most of it was tactical in nature. Of the operational level HUMINT sources, the guerrilla reports were often confusing and unreliable, and there were too few Alamo Scouts. As a result, American soldiers had to bump into the Japanese to develop an accurate enemy picture all too often.

The inconsistent performance of American intelligence on Luzon, illustrates the need for a balanced collection effort. We need all-source intelligence at the strategic, operational, as well as tactical levels. Only then can one intelligence discipline's strength compensate for another's limitations. With a balanced and flexible system, there is no need to send soldiers out to "check the intelligence arithmetic."[16]

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Intelligence, Beyond 2010

by Sergeant Major Alvin L. Scott, Jr.

This article proposes a glimpse of the battlefield integration of intelligence beyond the year 2010. This look into the future builds on the essence of the Intelligence Battlefield Operating System and some of the successes of Operation DESERT CAPTURE II. This base is combined with derivatives of existing and emerging technologies. Some of the details are deliberately presented to provoke thought on intelligence and electronic warfare (IEW) operations in the future.

Beyond the turn of the century, intelligence will be less a dedicated function and more an integrated part of command, control, communications, and computers infrastructure (C^4I). Devices and technologies now in use will affect how information moves on future battlefields.

The End State

2016: The setting is a battalion assembly area. Company commanders receive their final brief from the commander and later his staff. The only distinguishable difference from a briefing before the turn of the century is the lack of map boards and charts and a diminished battalion staff of only three officers (an executive officer, battle operations officer, and cyber-operations officer). All maps, charts, photography, video, and other briefing data are transmitted directly to each unit commander's helmet visor display.

Each soldier wears an integrated combat ensemble (ICE) computer system that forwards and stores pertinent mission data for reference during the operation. The briefing is very short, perhaps thirty minutes including questions. It consists primarily of standardized graphics, maps, and digital information (all Services accepted this format in 2011). Shortly after the briefing, unit commanders relay their unit missions and final instructions to their subordinate leaders. In some cases, these exchanges will occur without a face-to-face meeting.

Technology Integration

1995: These changes began with the "digitization of the battlefield." The modular ICE system is the culmination of several incremental combat developments. The ICE concept started with the acceptance of the Inter-Vehicular Information System (IVIS). The intent behind IVIS was to provide real-time information between cooperating vehicles and help the warfighters see the battlefield. This technology was soon extended to include individual combat soldiers. Exercise and combat success of a prototype ICE caused an immediate demand to field the system to all soldiers. The technological integration effort gained momentum.

2008: The ICE weighed about two pounds and attached to a tactical load-bearing vest. The system included a short-range transceiver, Global Positioning System (GPS) receiver, small computer, and power supply. A helmet-mounted display-visor and a weapon sight tether completed the system. A wireless infrared link later replaced the tether.

The ICE provided a function similar to IVIS for small units. A modulated infrared transceiver in the visor linked the soldier's visor-display to a family of enhanced small arms. The small arms used a common laser ranging and optical sighting system. Weapon systems data combined with the ICE's GPS informed adjacent unit members of the location of enemy targets. Each soldier knew the location of other unit members and enemy locations. The helmet visor displayed the situation in graphic form.

About the time of the ICE's initial fielding, tactical intelligence improved considerably with the full integration of intelligence at all levels. Accessing information both vertically and horizontally became a reality. A deployed division's analysis and control element could, with little effort, "pull" national level or adjacent unit's intelligence in near-real time. Technologic advances resulted in a multitude of new integrated collection systems.

However, the potential terabytes of raw data (now available to all analysts) complicated analysis. The actual task of searching for and retrieving specific data from national, theater, or various tactical level data bases was a nightmare. It soon became obvious that only the best trained analyst could handle this integrated system of systems.

The Army utilized "software agents" (SAs), an artificial intelligence technology, to solve this problem. Companies had only just begun to explore this technology in the mid-1990s. SAs provided the expertise few users had time to acquire or maintain. For the average user, SAs streamlined the complexity of the distributed information systems network. SAs performed searches, retrievals, and correlation from remote sources without prior knowledge of how or where to find it.

Any SA, once given a retrieval task to find information, could navigate a search across dozens of sources of data. They could even seek alternate routes, if needed. With only a terminal, need-to-know, and proper secu-

rity clearance an analyst could generate a SA. Most SAs typically resulted in an icon annotated overlay, accompanying text, and possibly related imagery or illustrations.

2010: Nearly every soldier was issued two or more processors (in some form) as part of his tactical gear. Communications technology evolved so far that the difference between tactical radios and computers became nearly non-existent. The usable bandwidth of tactical communication expanded. Most data exchanges were completely digital. Upgraded to tap into these developments, the ICE could accommodate stand-alone secured communication up to 2 kilometers.

After the addition of a natural-language (NL) module, the developers experimented using devices other than small arms. Providing each individual an NL processor eliminated the problem of adapting to personal variations of speech. A brief phrase like "display team locations" activated team location graphics.

2014: Tactical radios and computers finally merged into one device. All tactical computational devices had an innate ability to communicate. An updated ICE with an improved display created a "seamless" system. Few tactical computer systems still retained a keyboard or keypad. Speech activated devices performed the majority of functions.

The Army fielded ICE support processors (ICE-SP) to company-sized units. The ICE-SPs were intended to—

- ☐ Enable SA-assisted queries from authorized ICEs.
- ☐ Provide mass storage for bulky information like maps, and imagery to include unmanned aerial vehicle video.
- ☐ Provide communications network redundancy.

The ICE-SPs had no data displays but relayed their information directly to an ICE visor. They used an infrared or low-powered radio frequency link. The ICE-SPs greatly eased unit administrative and logistical tasks. Tasks like resupply and medical evacuations were simplified as the status and location of units and their members were always known. Individual units consolidated and centralized all support functions. The Army reduced the organization size of units below brigade level without degrading their capability.

Comprehensive C^4I

In its final form, the ICE became the cornerstone of a comprehensive command, control, communications, and computers infrastructure (C^4I) system. Despite six years of expansion in capabilities, the ICE processor and power supply still weighed less than three pounds. In actual use, a soldier could communicate with devices or equipment through use of the NL interpreter. The ICE transmitted these commands on either a low-power radio frequency or an encoded infrared beam (for short distance data exchanges). Equipment communicated back through the ICE to the soldier via the helmet visor and the audio headset.

Systems which required positive identification of the user (classified systems) used voice-recognition and biometrics. These systems read biometric data through a wrist clip or a visor retinal scan. Every soldier had a common interface with a family of computer-augmented small arms, communications, and information systems. For communications across distances greater than 2 kilometers, the ICE connected through networks of dedicated communication processors. Using unit level support processors, the ICE could access, query, and deliver applicable intelligence in a graphic or textual format.

2015: When the Army finished fielding the ICE-SPs, a cyber-network emerged with global access to all levels of information. Warfare changed drastically. The Army had nearly eliminated the "fog of war." U.S. soldiers could sense any opponent on any battlefield. The inherent clarity of any battle situation allowed tailored applications of forces. Independent brigades and reinforced battalion task forces became the deployed units of choice.

Units could see and experience any battle space without traveling to it. With the massive collection and data assimilation resources available, the system could electronically recreate any location for unit rehearsals. The "tooth to tail" ratio of deployed units improved significantly as cyberwarfare promised near perfect information with minimal extra baggage. Firepower, mobility, and total information were the keys to success. The cyberwarfare advantage was one sided because the technology had evolved and could not be purchased.

SA technology continued to mature. The barriers once presented by compartmenting intelligence were overcome. SA search, access, and correlation routine control structures concealed sensitive sources and collection methods. The Army developed decision-support SAs to further assist intelligence analysts. One of the first tasks SA assistants could accomplish was automatic intelligence summary (INTSUM) generation. The overall result—the intelligence consumers received intelligence from a more responsive system. An initiative began to develop offensive SAs which could analyze, target, and disable opposing C^4I systems.

The Infrastructure

Dedicated intelligence processing systems located at division and above include additional parallel processors. These machines spend most of their power fusing intelligence reports and sensor data to resolve ground truth. They automatically convert sensor reports to amplifying graphics, correlate the reports to known activities, and layer the graphics into a dynamic situation overlay.

Typical battle operations centers resemble a merging of the

old G2 and G3 shops. Asset management, intelligence analysis, targeting, operations, and planning are all performed in one or two mobile command vehicles. The deconflicted battlefield situation is broadcast to subscribing processors as graphic INTSUMs with incredible accuracy and at frequent intervals.

This technology reduced the authorization for intelligence analysts—fewer were needed. The clever and creative use of hybrid SAs serviced repetitive and time-intensive tasks. Specialized targeting SAs are smart enough to reliably recognize, correlate, and nominate high pay-off targets (HPTs). An analyst only needs to acknowledge these nominations. If a targeting SA finds a suspected HPT but lacks sufficient data, it will ask permission to dispatch a "spawned" SA to locate collaborating data. Another specialized SA assists analysts in tasking the collection managers.

At division level, at least one intelligence processor exists solely to consolidate subordinate SA queries. This shortens the response time for frequently requested information. Machines and SAs search for patterns and indicators while analysts interpret the results and redirect SAs. The bulk of human time is devoted to predictive analysis, targeting, anticipating situation changes, and tasking assets. Much less time is spent servicing queries, updating data bases, and preparing INTSUMs and journals.

Conclusion

This technological integration achieved several things. It validated and enhanced the IEW doctrine of the 1990s. C^4I maintained these characteristics:

- ☐ **Downward focus.** All commanders and their staffs have a common view of the battlefield.
- ☐ **Simultaneous support.** The evolved architecture ensures all echelons have access to all fused data and products.
- ☐ **Enhanced coverage.** The full integration and synchronization of all intelligence reports occurs in real time.

- ☐ **Skip echelon flexibility.** Analysts conduct SA data queries, searches, and requests across all echelons and adjacent units.
- ☐ **The commander drives intelligence.**

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SPEAR

(Continued from page 24)

- ☐ Greatly simplified its deployment.
- ☐ More effectively managed organic in-theater intelligence assets.
- ☐ More effectively used the intelligence expertise available in the division.

We must address two potential problems. First, the dissemination of imagery over the MSE network using current LAN software was very time intensive. It took up to 40 minutes to disseminate some imagery to the brigade TOC. The Army can overcome this deficiency in the short term with hardware and software upgrades.

The second potential problem is more subtle. The commander's great thirst for imagery and the tactical intelligence community's ability to satisfy that thirst creates a problem. Most combat arms commanders are most comfortable with intelligence based on "eyes on." While intelligence collection from technical sensors is not disregarded, they are viewed with some suspicion. This distrust often occurs due to a limited understanding of sensors and the collection process, and from the often briefed susceptibility of sensors to deception.

The addition of imagery, from any source, to confirm enemy locations and movement adds credibility to other intelligence sources. The question is: Do we currently have the communications and automation capability to provide the necessary quantity of imagery to the "point of the spear?" The answer is a resounding no. Will we ever have the technology—yes. Training events of this nature will allow us to define the level of detail necessary, which in turn will drive the development of technology.

The thrust of this event was to take our first steps synchronizing all elements of the intelligence system, tactical to national. This helped us to provide "first-class," continuous support to all commanders. As described in the Force XXI concept, information is the high ground. This experience marked 4th ID's crossing of the line of departure to seize that high ground.

LTC Phillips is currently Commander, 104th MI Battalion, Fort Carson, CO. ***The 104th MI Battalion crest appears inside the back cover.*** *Previously, LTC Phillips helped develop the Army Intelligence Master Plan. He received a bachelor's degree from the University of Southern Mississippi and a master's degree from Central Michigan University.*

Worldwide Intelligence Conference

by Major Pat M. Madden

The U.S. Army Intelligence Center and Fort Huachuca held its first Worldwide Intelligence Conference (WIC) from 30 January through 3 February 1995. More than 500 intelligence professionals worldwide attended this landmark conference. The theme of the conference was *"Force Projection Operations in the 21st Century."* The conference's purpose was to validate the Intelligence XXI Vision which supports the overall Army Force XXI initiative. Additionally, the conference validated the panel results of the 21st Century Intelligence Technology Symposium (conducted at Fort Huachuca from 9 through 13 January 1995). The results of the symposium and validation process will lead to the development of the intelligence and electronic warfare (IEW) Technology Investment Strategy that we (the Directorate of Combat Developments) will publish in July 1995.

There were two sessions of the conference. The executive session met from 30 January to 1 February. We focused this session toward the 300 allied and U.S. military general officers, senior government civilians, corporate chief executive officers (CEOs), and representatives from academia. Attendees included the Army Deputy Chief of Staff for Intelligence and more than 30 other general officer-level personnel from all Services, 200 CEOs, and other senior intelligence personnel. During this session the participants reviewed and discussed the Intelligence XXI Vision, panel results of the Technology Symposium, and other selected briefings.

The second session of the WIC ran from 1 through 3 February 1995. This portion of the WIC was the more traditional G2 and commander's conference. We limited attendance primarily to U.S. government participation with special emphasis on military intelligence (MI) brigade and battalion commanders, J2s, G2s, and other senior intelligence officers. We devoted this session of the conference to briefings on—

- ☐ The Intelligence XXI Vision.
- ☐ Technology Symposium results.
- ☐ Field updates from various major commands.
- ☐ Discussion of specific issues from the field.

WIC participants and the local community had the opportunity to view future MI equipment and industry displays that showcased the latest in emerging MI systems. The exhibits also provided a look at future force projection-related technology under development by industry.

Several highlights of the WIC made this event special:

1. Lieutenant General James R. Clapper, Jr. (Director, Defense Intelligence Agency) addressed the conference as a guest speaker.

2. The 313th MI Battalion (Airborne) demonstrated the effective use of MI units in force projection operations—executing a battalion tactical airborne jump into Libby Army Airfield.

3. WIC attendees and the local community viewed the largest exhibition of joint intelligence equipment ever seen at Fort Huachuca. The WIC displayed the following aircraft at Libby Army Airfield—

- ☐ **Air Force:** U-2R, RIVET JOINT, COMPASS CALL, and EC-130.
- ☐ **Navy:** ES-3 and P3 Orion.
- ☐ **Customs Service:** Citation.
- ☐ **Army:** unmanned aerial vehicles (UAVs), GUARDRAIL Common Sensor, CRAZY HORSE, and several helicopter systems.

The impressive array of ground equipment included an analysis

A static display of the Hunter Unmanned Aerial Vehicle-Short Range.

LTC Rosello (Commander, 313th MI Battalion) presents BG Thomas (Commander, U.S. Army Intelligence Center) a plaque following a battalion tactical airborne jump.

The 313th MI Battalion (Airborne), started the four-day training exercise at Fort Huachuca with a tactical airborne jump. The operation also "kicked off" the start of the WIC. The seven-hour flight included an opportunity to inflight-rig—put on a parachute during the flight. This task was one of the battalion's training objectives. When the soldiers reached the ground, they quickly assembled for a 12-mile road march to the training site in Garden Canyon. During the field training exercise, the battalion practiced day and night land navigation in a desert environment. The battalion was also able to preview some of the equipment they will receive soon.

and control element, Division Intelligence Support Element, TROJAN Special Purpose Intelligence Remote Integrated Terminal II, Mobile Tactical Operations Center, Ground-Based Common Sensor, Joint Surveillance and Target Attack Radar System and UAV ground stations.

The results of the first WIC are a major milestone along a progression of events that will chart the future of MI. The WIC was an important step in creating and implementing Intelligence XXI and supporting the Army's new Force XXI concept.

MAJ Madden is the Chief, Concepts and Master Plans Division, Directorate of Combat Developments.

Joint Doctrine and Joint TTP

Joint operations: Connotes activities, operations, organizations, and so forth, in which elements of more than one Service of the same nation participate. (When all Services are not involved, the participating Services shall be identified, for example, as Joint Army-Navy.)

Who Provides Joint Operations Doctrine?

The Chairman of the Joint Chiefs of Staff has overall responsibility for developing joint doctrine and joint tactics, techniques, and procedures (JTTP). In conjunction with other members of the Joint Chiefs of Staff and combatant commanders, he approves all joint doctrine and JTTP publications and modifications.

The Services, combatant commands, and Joint Staff directorates also participate in joint doctrine. They—

- ☐ Develop specific joint doctrine and JTTP projects as assigned by the Chairman of the Joint Chiefs of Staff.
- ☐ Assist other organizations to develop joint doctrine and JTTP projects.
- ☐ Participate in conferences called to address joint doctrine and JTTP issues.
- ☐ Coordinate with each other to develop and maintain all joint doctrine and JTTP.

The Services and combatant commands support the evaluation of joint doctrine and JTTP projects in exercises. Additionally, the Services, combatant commands, and Joint Staff directorates can propose doctrinal projects for consideration in accordance with **Joint Pub 1-01**. Within these rules, individual Services (in our case Army Military Intelligence [MI]) provide input to joint doctrine writers, support evaluation of joint doctrine, and propose doctrinal projects for development.

Army MI doctrine and tactics, techniques, and procedures (TTP) do not replace joint doctrine. However, they provide the standardization needed to ensure that our MI forces train for and fight successfully in the joint arena.

MI Doctrine BBS

Here in the Doctrinal Publication Division (DPD), Directorate of Operations, Training, and Doctrine (DOTD) at the Intelligence Center we continue to assist units in obtaining ready access to current MI doctrine. Therefore, we established an MI doctrine bulletin board system (BBS) that you can access 24 hours a day. We load revised manuals on the BBS as we update them. The manuals are in draft form, except **FM 34-1** which was published 27 September 1994. We save the manuals

in Word Perfect 5.2, 6.0, and 6.1 formats.

We operate on an MS-DOS-compatible 386 computer using a program called "Wildcat." To access the MI doctrine BBS, you need a computer with modem and a communications program (e.g., PROCOMM). If you don't have a commercial communications program, use the Windows terminal communications located in "accessories."

Logging into our system will allow you to upload and download. You can review MI doctrinal manuals currently under development and provide valuable comments back to the writers. Additionally, you can also download manuals we have sent to the printer. Please note that some online manuals do not include the graphics.

As of 1 February 1995 the following files are available on our MI doctrine BBS:

- ☐ **FM 34-1, Intelligence and Electronic Warfare Operations.**
- ☐ **FM 34-3, Intelligence Analysis and Synthesis (Initial Draft).**
- ☐ **FM 34-8-2, Intelligence Officers Handbook (Initial Draft).**
- ☐ **FM 34-25-1, Joint Surveillance Target Attack Radar System (Joint STARS) (Initial Draft).**
- ☐ **FM 34-25-2, Unmanned Aerial Vehicle (UAV) (Final Draft).**
- ☐ **FM 34-25-3, All-Source Analysis System and the Analysis (ASAS) (Final Draft).**
- ☐ **FM 34-55, Imagery Intelligence (Writers Draft).**
- ☐ **FM 34-60, Counterintelligence (Initial Draft).**
- ☐ **FM 34-81/AFM 104-5, Weather Support for Army Operations (Initial Draft).**
- ☐ A list of published MI manuals.
- ☐ The most recent issue of the **MI Professional Bulletin.**
- ☐ **DA Form 2028 (Recommended Changes to Publications and Blank Forms).**

BBS Operations

1. Decompression. We compress all of our files using "PKZIP." Then we convert them so that they can self-extract. That means after you download a file, you access it by using file manager or by typing **the FM number, for example** <34-81>, at the DOS prompt. (These angle brackets < > show what you should type.) The file then automatically decompresses into its separate text files. Note: We recommend you copy the compressed file to a separate directory on your hard drive and then decompress it. You can then use your word processor to read the decompressed file.

2. Your account. We ask that you establish an account for yourself. Whenever you connect to the BBS, it asks for your first name, last name, and password. If at any time you forget your password, please call us. We will verify your identity and give you your password. Your password allows you to access anything loaded into the BBS and leave comments or messages.

3. To log on. Follow these instructions:

a. Adjust your modem to the following settings:

- ☐ Parity: N
- ☐ Bytes: 8
- ☐ Correction: 1
- ☐ Baud Rate: 9600

b. Dial the telephone number: DSN 821-6370 or Commercial (520) 533-6370.

c. The computer will ask you to "Enter First Name," then to "Enter Last Name," and finally to "Enter Password." You can enter a password of your choice.

d. After you enter your name and password, the program asks several questions about you and your computer. Answer these questions to set up your BBS account. It will also ask you to choose a protocol. Other BBS users succeed when they select <Z-MODEM>. Using this protocol allows you to download multiple and single files.

e. Once you answer the questions, you will see "NEWUSER" on the bottom of your screen, "Comments" on the left side of the screen, and "Good Bye (hang up)" on the right side of the screen. Since you are still a new user, we recommend that you press <M>. This brings up the main menu screen. Select <F> for the files menu and then select <L> and press <Enter> to list all the available files.

f. We will upgrade your account to "FULLUSER" within a day or so. Once you are a recognized user, just log-on and continue to press <Enter> until the main menu appears.

4. Downloading a single file. To download a single file, follow these instructions:

a. After you log on, continue to press the <Enter> key until the main menu appears.

b. Press <F> from the main menu to see the files menu.

c. Press <L> from the files menu and press <Enter> to list all the available files.

d. Press <C> to continue viewing all the files loaded on the BBS.

e. Press <D> from the files menu or from the list of files for download procedures.

f. Enter the file name you want to download. (e.g., for **FM 34-81, Weather Support for Army Operations**, the file name is 34-81.EXE so you would type <34-81> and <Enter>.)

5. Downloading batch files. Follow these instructions:

a. After you have the list of files on the screen, select <M> to mark the file(s) you want to download.

b. The program will then ask you what file numbers to mark. Type in each file number.

c. After you finish marking the files you want, press <D> to download.

d. The program will ask you for a destination path. Type in your desired pathway, normally a hard drive path, such as <C:\(subdirectory name)>. For example, type <C:\FM34-81> to download.

e. Select a protocol into which to download (we recommend Z-MODEM).

6. Uploading files. Follow these instructions (similar to downloading). Upload your file with a different file name (for example, DA2028.jdw). Use the initials of the person uploading the file as the extension. The BBS will not allow you to upload over a file that we loaded onto the BBS. Ensure you list the manual number on the **DA Form 2028.**

Follow these instructions to upload a file:

a. Press <F> from the main menu to see the files menu.

b. Press <U> from the files menu to upload.

c. Press <Y> for yes.

d. Press <L> for list.

e. Select the number that corresponds to the file you upload. The computer will ask for a small description. When the prompt "Do you want to leave a detailed description of this file?" appears, select <N> for no (unless you need to leave a specific comment file that will not fit into the small description field).

7. Logging off. Follow these instructions:

a. Press <Q> for quit (which appears at the bottom of the screen).

b. Press <S> for stop.

c. The prompt "Do you want to continue" appears. Press <Y> for yes.

d. Press <Q> from the file menu to quit to the main menu.

e. Press <G> from the main menu for "good bye" (exit or hang up).

f. The prompt "Are you sure you want to log off?" appears on the screen. Press <Y> for yes.

We Need Your Input

Please submit comments and recommendations on a **DA Form 2028 (Recommended Changes to Publications and Blank Forms)**. To expedite your response, we loaded this form in our BBS for your use. The **DA Form 2028** is in Word Perfect format. You can download this form onto a floppy disk and enter your comments.

Contact Ms. Janet Walker, Commercial (520) 538-0995 or DSN 879-0995 if you have any problems or need assistance in operating this BBS.

Assessing Intelligence

(Continued from page 35)

data to prepare feedback is the **diagnostic record** in Figure 6. The feedback from the analysis is not one measure, but "a pattern of measures." We propose four measures:

- ☐ **Comprehensives,** the number of information items that were acceptable.
- ☐ **Criticality,** the importance of the information items missed.
- ☐ **Effectiveness,** the total usefulness of the information to the observer-participant.
- ☐ **Distribution of performance ratings,** how the observer-participant rated each dimension on the scale.

DIAGNOSTIC RECORD

Inquiry Date (Include location)	Problem(s) Identified	Information Deficiencies	Causes	Recommended Solutions
G2 OPS had no idea of FSE priorities. Info was available.	All Tgt info goes out Ops immediate. Large comm backlog.	FSE high payoff Tgt info in support of attack.	Poor ops relationship with FSE. No updating of priorities. G2 OPS not aware it can get help from ASPS.	Get G2 involved. The whole priorities process needs emphasis.
ASPS/CI Team coordination of OPSEC EEI not being done. Desired info available or can be developed from on hand data.	OPSEC EEI not used in output development.	OPSEC Friendly vulnerabilities.	Failure to develop output which incorporates user needs.	Tighten ASPC/CI team and CM&D dialogue.
SWO/G2 Ops - SWO needs training on Divisions use and need for weather with special attn to ADA.	Standard Wx report form doesn't meet ADA needs. During attack phase frequency of reports inad.	Wx effect (ADA needs rapid refresh).	SOP is inadequate to meet ADA needs, for sure during offensive ops.	Revise SOP ASAP.

Additional Comments:

High Value payoff information is available in great volume. Managing it may require dedicated soldier. New analyst is well supervised and doing a good job. On the ADA matter, in addition to SOP, there is a real need to cross train some Intel and ADA people to appreciate each others capabilities.

Figure 6. Diagnostic Record.

CONCLUSION

MIUE will provide a pragmatic view of how the intelligence staff supports the command. The process identifies deficiencies in operations that need correction, modification, or training. The command and staff improve their ability to express intelligence information needs and standards to the intelligence sections—this improves readiness. The process does not require a dedicated team or outside evaluators. Finally, it provides a feeder mechanism for intelligence training that will enhance command and control. Please provide any feedback on MIUE to ARL at DSN 879-4704.

CPT Kraak is the Intelligence and Electronic Warfare Manager, ARL at Fort Huachuca, AZ. He has a bachelor's degree from the University of Wisconsin at Milwaukee and a master's degree from Ohio State University.

MI CORPS HALL OF FAME

The Military Intelligence (MI) Corps will induct the 1995 Hall of Fame selectees on 30 June at Fort Huachuca, Arizona. These distinguished Americans made outstanding contributions to our country, the U.S. Army, and the MI Corps. We will honor the following individuals.

Ms. Mary E. Bowser

Ms. Bowser was born a slave and worked on the John Van Lew plantation outside Richmond, Virginia. After her father's death in 1851, Elizabeth Van Lew freed Ms. Bowser and other Van Lew family slaves. Mary was a very intelligent woman; Elizabeth recognized that and sent her north to attend school in Philadelphia.

During the Civil War, Union sympathizer Elizabeth Van Lew organized an intricate spy operation. Elizabeth Van Lew sent for Mary Bowser after deciding to plant a Union spy in the home of Jefferson Davis, the President of the Confederacy. Mary gained employment in the Davis mansion (in Richmond) as a servant because of Ms. Van Lew's recommendation.

Mary pretended to be a bit "dull and unconcerned," but she listened to and memorized conversations between Davis and his visitors as she served their dinner. She read war dispatches as she dusted the furniture. Each night after she finished her duties, Mary traveled to the Van Lew mansion which was some distance from the Davis mansion. Upon her arrival, she recited from memory the private conversations and documents. After she coded the information, it passed directly to the Union's General Grant, greatly enhancing the Union's conduct of the war.

Jefferson Davis knew the Union somehow kept discovering Confederate plans but never discovered the leak in his household staff.

Specific details of Ms. Bowser's activities and precise knowledge of the information passed to General Grant are unknown. In the interest of their protection, all records on Ms. Van Lew and her agents were destroyed after the war. However, it is certain that Mary Bowser succeeded in a highly dangerous mission that significantly benefited the Union effort. She was one of the highest-placed and most productive espionage agents of the Civil War. Exact details of Ms. Bowser's date of birth and the year of her death are unknown.

Lieutenant Colonel (Retired) Gero Iwai

Lieutenant Colonel Iwai had a long and distinguished career. He served the U.S. Army as both an enlisted member and a commissioned officer from 1931 to 1957. LTC Iwai dedicated his entire military career to counterintelligence activities. From 1931 to 1941, LTC Iwai conducted numerous monitoring activities of the Japanese community in Hawaii. His observation included the activities of the Japanese Consulate and other Japanese-Americans. Because of the nature of his work during this period, the entire Japanese-American community, including his own family, were unaware of his undercover assignment. Due to the sensitivity of his assignment, he could not socialize with friends. This resulted in the estrangement of his family from the rest of the Japanese-American community. Only after the beginning of World War II (WW II) did he advise his family of his true military status.

Shortly after the Japanese attacked Pearl Harbor, LTC Iwai assisted in the interrogation of the first Japanese enemy prisoner captured in WW II. He conducted this questioning with a fellow Nisei Navy officer (on a similar assignment) and agents from the Federal Bureau of Investigation. This prisoner, commander of a Japanese midget submarine, provided significant information about a map found aboard the submarine.

LTC Iwai analyzed and interpreted that information. For his performance as a special agent and his superior translation skills, LTC Iwai received his first Bronze Star medal.

After WW II, LTC Iwai continued to engage in highly sensitive intelligence operations. He focused his intelligence coverage on the Communist threat against U.S. military installations and personnel in Hawaii. Later assigned to Tokyo, he used his considerable talents as a liaison between his counterintelligence organization and elements of the Japanese Government. This resulted in close cooperation between the two entities. In recognition of his service, Tokyo's Governor awarded LTC Iwai the Gold Key to the city. He was the only American military officer to receive this honor. LTC Iwai earned his second Bronze Star for his valuable service in Japan.

LTC Iwai retired from military service in 1957. The MI Corps recognizes him as a pioneer Nisei intelligence agent in America's military effort against Japan during WW II. His efforts laid the groundwork for the eventual acceptance and widespread utilization of more than 6,000 Nisei soldiers during WW II. LTC Iwai passed away in 1972.

Chief Warrant Officer 5 (Retired) Robert P. Oliver

Chief Warrant Officer Oliver began his military service in 1963 when he enlisted in the U.S. Army. Early in his enlisted career, Chief Oliver reclassified into MI where he spent the remaining 28 years of a 30-year plus career. His MI training began at Fort Holabird, Maryland, followed by Japanese language training at the Defense Language Institute, Foreign Language Center. Chief Oliver served five tours outside the United States in Japan, Korea, Vietnam, and Germany. Chief Oliver also wrote dozens of policy position papers—often used verbatim by major commands, the Department of the Army, and other Government agencies.

As a result of his total review of a detailed intelligence program, Chief Oliver saved the U.S. Government millions of dollars. Chief Oliver's last military assignment before retiring involved functioning as a career manager. In this capacity, he aptly served as the primary mentor for his fellow MI Warrant Officers.

Chief Oliver's military career was long, proud, and exemplary. The nation, the Army, and specifically MI benefited immensely from his contributions. Chief Oliver is a legend in his field.

Major General (Retired) Charles F. Scanlon

After graduating from the University of Florida with a Bachelor of Arts degree in political science, Major General Scanlon received his Army commission as a second lieutenant. He also holds a Master of Arts degree in American studies from the University of Hawaii and completed graduate work at Penn State and Harvard.

In his 33-year career, General Scanlon's successes parallel the recognition of MI as a full member of the Army team. During each of his assignments, General Scanlon's professionalism, dedication to duty, and leadership were evident to all with whom he served. His key assignments (in sequence) include—

- ☐ Executive Officer to the Assistant Chief of Staff, J2, U.S. Military Assistance Command, Vietnam; then G2, 101st Airborne Division (Airmobile), Vietnam (1970 to 1971).
- ☐ Intelligence analyst in the Office of the J2, U.S. Pacific Command, Hawaii; then a military assistant to the Commander-in-Chief, U.S. Pacific Command (1971 to 1973).
- ☐ Chief, Collection Division, Deputy Chief of Staff for Intelligence, U.S. Army Europe; then Commander, 66th Military Intelligence Group (1977 to 1980).
- ☐ Deputy Chief of Staff for Operations and Plans, U.S. Army Intelligence and Security Command (INSCOM).
- ☐ Executive to the Assistant Chief of Staff for Intelligence, Headquarters, Department of the Army (HQDA).
- ☐ Deputy Commander for Support (1983); Deputy Commanding General (1985); and Commander, INSCOM (1990).

Never was General Scanlon more challenged than during his tenure as the Commanding General of INSCOM. Momentous worldwide changes necessitated a reorientation of Army intelligence from its past emphasis on the Soviet Union and Warsaw Pact to regionally focused threats. With the Army restructure and return of forces to the United States, General Scanlon orchestrated monumental changes to INSCOM's mission. He completed a mission area analysis (MAA) in each functional mission area to assess current opera-

tions, determine future requirements, and realign INSCOM missions with the new "world order." Using the MAA process, General Scanlon guided INSCOM through the successful post-Cold War transition. A few of these changes included the closure of the Berlin, Sinop, and Augsburg Field Stations and transfer of the U.S. Army Russian Institute to the European Command. General Scanlon saw the need for a more mobile, flexible, and technically advanced echelon above corps intelligence capability.

General Scanlon provided the focus to set priorities, concentrate resources, and apply the unique capabilities of INSCOM to support critical missions throughout the world. As a result of his foresight and skill, he ensured INSCOM soldiers and civilians gained the necessary training, equipment, and assignments to support deployed forces in many locations with notable success.

Lieutenant General (Retired) Harry E. Soyster

Lieutenant General Harry Soyster graduated from the United States Military Academy in 1957. Commissioned as a second lieutenant, he received a Bachelor of Science degree in engineering. General Soyster received a Master of Science (MS) degree in chemistry in 1963 and another MS in systems management in 1973.

General Soyster's long career culminated while serving as the Director, Defense Intelligence Agency (DIA) from December 1988 to September 1991. Before this, other key positions included Commander, INSCOM, and Deputy Assistant Chief of Staff for Intelligence for Systems and Automation, HQDA. He also served as Commander, Division Artillery and later as Chief of Staff, 24th Infantry Division.

As DIA Director, General Soyster oversaw the defense intelligence effort that supported Operation JUST CAUSE in Panama. JUST CAUSE displayed the benefits of increased cooperation and planning between DIA and operational force planners. The end of the Cold War marked a reevaluation of the intelligence mission throughout the defense community. A new era began for intelligence elements with the fall of Communist parties in many East European countries and the reunification of Germany.

General Soyster was quick to realize the implications of this and placed increased emphasis on improved management of intelligence production throughout the Department of Defense. Iraq's invasion of Kuwait in 1990 resulted in a coalition of United Nations forces resolved to force the Iraqis from the country. Establishing a Joint Intelligence Center (JIC), General Soyster oversaw an intensive and extensive 24-hour operation. The JIC provided daily tailored intelligence support to coalition forces, participated in daily press briefings, and produced the full range of materials various consumers required. No commander has ever had as complete a view of his adversary as did the United States and Coalition field commanders during Operation DESERT STORM. It is a great example of intelligence support to operational forces in modern times.

During General Soyster's tenure as Commanding General, INSCOM, the worldwide command met many new challenges that extended across a wide spectrum of intelligence and security disciplines. Highlights include:

- ☐ Restructuring assets to allow an expedited transition to war.
- ☐ Introducing new technological support to the commander on the ground.
- ☐ Undertaking new collection initiatives.
- ☐ Making preemptive actions to counter the threat to U.S. Army security.

Throughout his 34-year military career, General Soyster exercised vigorous leadership of the highest order in applying state-of-the-art technology to the challenges facing Army intelligence. He helped map the future of the MI Corps.

MI Corps Hall of Fame Nominations

The Office of the Chief of Military Intelligence (OCMI) accepts nominations for the Military Intelligence (MI) Hall of Fame throughout the year. Anyone can nominate an individual for induction into the MI Hall of Fame. Commissioned officers, warrant officers, enlisted soldiers, or civilians who served in a U.S. Army intelligence unit or intelligence position are eligible.

The OCMI can provide information on the nomination process. If you wish to nominate someone contact OCMI, U.S. Army Intelligence Center and Fort Huachuca, ATTN: ATZS-MI (Mr. Chambers), Fort Huachuca, AZ 85613-6000; or call DSN 821-1180 or Commercial (520) 533-1180.

PROPONENT NOTES

Warrant Officer Notes

Congratulations if you have been selected to attend the Warrant Officer Candidate School (WOCS) at the Warrant Officer Career Center, Fort Rucker, Alabama. If you succeed and complete WOCS you will become a Military Intelligence (MI) Warrant Officer. However, first you must become a Warrant Officer at Fort Rucker. We hope you began your preparation for WOCS the day you submitted your application packet; if not, your preparation starts the day you receive notice of your selection for WOCS.

Chief Warrant Officer 2 (CW2) Mark K. Wykoff, a 351E, Interrogation Technician, submitted the following article. He currently serves as a training, advising, and counseling (TAC) officer to the 1st Warrant Officer Candidate Company at the Warrant Officer Career Center. CW2 Wykoff's article provides WOCS candidates with insight that can ensure they arrive for the course fully confident and ready to succeed.

Preparation for Success at WOCS

"...To train candidates to the duties and responsibilities of a warrant officer. Training is conducted in a very rigorous, high stress environment where candidates are challenged mentally, physically and emotionally."... states an extract from the WOCS mission statement. Although WOCS is a highly stressful, fast-paced, and challenging six-week program charged with assessing the leadership qualities of every candidate, experienced MI soldiers have performed exceptionally well. In one class, the Distinguished Honor Graduate, the Honor Graduate, a member of the Commandant's List, and the Candidate Commanding Officer (the highest leadership position attainable by students) were all MI soldiers.

Although MI soldiers have experienced successes, they have also experienced mishaps. The WOCS is not the Professional Leadership Development Course (PLDC) or the Basic or Advanced Noncommissioned Officers' Course (BNCOC or ANCOC). WOCS is a distinct entity with an entirely different focus. The following bullets offer insight into what it takes to succeed at WOCS.

- ☐ **Physical Fitness.** Approximately 20% will not complete the first three days of training. Factors such as stress, climate, and change of diet will lead to diminished performance—therefore, you must arrive over-prepared.
- ☐ **Fundamentals.** Get back to the fundamental business of soldiering. Ensure your uniform and military courtesy are equally sharp. No prior assignment justifies inability to perform fundamental soldiering tasks.
- ☐ **Individual Clothing and Equipment.** WOCS does not require the candidate to purchase an entire issue of uniforms; however, as a future officer, ensure your appearance is worthy of emulation. Take a great deal of pride in the condition and maintenance of your individual uniforms and equipment. If you must replace items, purchase a few items each month (to minimize the blow to your finances). Upon request, the 1st Warrant Officer Company will provide a pamphlet that contains a wealth of information and outlines specific preparatory clothing information.
- ☐ **Personal Family Affairs.** You will have little or no time during WOCS to attend to personal affairs. If your affairs are not in order you will find yourself either unable to perform adequately or with increasing personal problems. Temporary personal problems, of a serious nature, can warrant a request for deferment until completely resolved. You must attend WOCS with your personal affairs completely in order.
- ☐ **Networking.** Find a recent graduate and offer to take him to lunch in exchange for insight into the workings and content of the course. A thorough understanding of WOCS expectations is an advantage that affords you an opportunity to excel from the first day.
- ☐ **Academics.** Academics are important, and constitute most of the total grade; however, physical conditioning and fundamental soldier tasks cause most of the eliminations.

In summary, the most important aspects of your preparation for WOCS are to arrive in outstanding physical condition, with a complete set of uniforms, understanding course expectations (as a result of networking), and with your personal affairs in order. These candid tips will enable soldiers to arrive better prepared and ready to excel.

Point of contact is CW4 Jeff Platt, Office of the Chief, Military Intelligence, Warrant Officer Professional Development Manager, DSN 821-1183, or Commercial (520) 533-1183.

Enlisted Notes

Career Management Field 98, Merger of military occupational specialty (MOS) 98D (Emitter Locator/Identifier) with MOS 98H (Morse Interceptor). The Intelligence Center and Fort

Huachuca continues to work toward merging MOS 98D into MOS 98H. The U.S. Army Training and Doctrine Command (TRADOC) must formally approve a proposed MOS 98H course revision with a 28-week, 4-day schedule. If TRADOC approves this change, the Office of the Chief of Military Intelligence (OCMI) will submit a change proposal to **Army Regulation 611-201, Enlisted Career Management Fields and Military Occupational Specialties.** If U.S. Total Army Personnel Command (PERSCOM) approves, it will redesignate all soldiers holding MOS 98D to 98H starting in October 1996. Transitional plans are still in development. The recommendation is to conduct all transitional training at the unit. Affected soldiers would not return to the Intelligence Center for transitional training.

Language

MI units that already have or are contemplating establishing Command Language Programs (CLPs) should consider sending soldiers to the Defense Language Institute, Foreign Language Center (DLIFLC) CLP Manager's Course. The five-day course will help CLP Managers address Department of Defense Inspector General language concerns and ensure they have viable unit CLPs. There is no cost for the course other than normal temporary duty travel. Contact Mr. Art Gebbia, DLI at DSN 878-5363, FAX (408) 242-5512 for details.

The following provides a brief overview of the current issues at the Army Language Committee (ALC).

1. Awarding extra promotion points on E-5 (SGT) and E-6 (SSG) promotion worksheets for MOS 98G and 97E. The MI soldier would receive extra points if he meets or exceeds the minimum language proficiency standard of 2/2. The current PERSCOM policy of promoting to grades E-5 (SGT) and E-6 (SSG) by language for MOS 98G and 97E would not change.

2. The Army is now staffing a detailed analysis of the need for large numbers of language-coded positions in MOS 98C (Signals Intelligence Analyst) and 97B (Counterintelligence Agent). Interested agencies, the Army staff, and major commands are reviewing this analysis. In accordance with **AR 611-6, Army Linguist Management**, the Army may no longer need some positions in these two non-language-dependent MOSs to meet specific language operational requirements. If the Army can identify reductions, we may realize savings in initial language training.

3. MOS 97L, Translator/Interpreter (RC). The Intelligence Center and Fort Huachuca will host two Spanish-language iterations of Advanced Individual Training (AIT) courses in October 1995. In addition, we will conduct three transition courses in Spanish, Korean/Japanese, and Russian at Fort Huachuca. We have scheduled one transition course in Spanish for Fort Bragg and one transition course at the 300th MI Brigade (Linguist), Draper, Utah. We would appreciate contributions of foreign language books, periodicals, magazines, journals, or other reading material to develop translation materials for 97L students. If interested, contact LTC Pete Shaver at DSN 879-2208 or Commercial (520) 528-2208.

TOTAL FORCE

MID(S) Restructure: Support to the Warfighter

The U.S. Army Reserve's (USAR's) 59th MI Detachment (Strategic) (MID[S]) dates from the post-World War II era. Their structure and focus are Cold War driven. The ongoing Reserve Component (RC) MI Force Design Update will significantly impact these units, particularly the 22 that support the warfighters. The Army will redesign these 22 MID(S), currently supporting the theaters, to provide a Theater Intelligence Support Element (TISE) to each theater. Each TISE will have a modular configuration and the Army will tailor them to maintain existing capabilities, increase flexibility, and address theater-specific requirements.

RC MI Officer Transition Course

Beginning this fiscal year, mobile training teams will teach the RC MI Officer Transition Course throughout the continental United States. The MI Proponent recently authorized the export of the two-week resident portion of this training. Previously, this phase was available only at Fort Huachuca, AZ. The 6th Reserve Forces School-Intelligence (RFS-I) will centrally manage this training.

The point of contact, 6th RFS-I is LTC Hoeft, DSN 879-2311/12 or Commercial (520) 538-2311/12.

RC INTELLIGENCE SUPPORT

The USAR Command has initiated the process to systematically support the Army's peacetime intelligence mission. The Active Component (AC) is identifying intelligence missions where constrained resources and staffing prevent mission accomplishment. USAR MI units will assume these missions.

A test of this concept began in the Southeast Region in January 1995. The test will consist of three elements:

1. USAR MI units in the Southeast Region. Initially, the test will focus on the USAR's 337th MI Battalion (Tactical Exploitation) and 138th MI Company (Aerial Exploitation). Other USAR MI units in the region will participate as the test progresses; the USAR may task units outside the region as appropriate. AC missions will primarily flow from the normal WARTRACE relationship, but will also address other Army and joint requirements.

2. Southeast Regional Intelligence Center (RIC). The Southeast RIC will build on the existing Regional Training Site-Intelligence (RTS-I) at Fort Gillem, GA. Historically, the five continental U.S. Army RTS-Is had a training-only mission. The RIC will add the capability to provide intelligence support to the AC. Using existing facilities, connectivity and currently assigned active Guard and Reserve staffing will serve to minimize the incremental costs. There is a small AC bill to pay—AC manning to help staff the RIC. This investment will give the AC force access to previously untapped RC assets and capabilities. As a token of the AC's commitment, MI soldiers from the 513th MI Brigade (EAC) rotate through the RIC in support of the test. In summary, the RIC acts as a regional AC and RC liaison point of focus and provides the USAR MI units all requisite support to accomplish the mission. This support includes a sensitive compartmented information facility (SCIF), and subject-matter-expert advise.

3. Army Reserve MI Support Element (ARMISE). The ARMISE is the AC's point of entry to the RIC and the USAR MI support. The ARMISE will coordinate missions among the five RICs, channel mission support funding, and generally act as a "gatekeeper" between the AC and RC. This ARMISE will not impact existing AC to RC WARTRACE mission relationships. However, the ARMISE will capture these WARTRACE missions to eliminate redundancy, determine capabilities, and identify residual capacity.

During the conceptual test the ARMISE will collocate with the Southeast RIC. The test and evaluation will run through the end of FY '95. Interested AC elements may contact the ARMISE representatives. POCs at the ARMISE are MAJ Esser at DSN 797-3172 or Commercial (404) 362-3172 or CPT Kennard at 1-800-873-0490.

USAR MI Linguist Companies

Seven new linguist companies will activate in the U.S. Army Reserve (USAR) in fiscal year (FY) '95. These companies will join the six Army National Guard (ARNG) linguist battalions of the 300th Military Intelligence Brigade (Linguist) and the USAR's 368th MI Company (Linguist). All of the units are based on a modular construct of a five-person team. Unlike the balance of the current RC military intelligence (MI) unit force, the linguist units can mobilize selectively down to the team level via derivative unit identification codes.

Each of the new companies will consist of 14 teams and a headquarters element. The linguist teams will not just collocate with the headquarters; they will also locate in many adjacent states. Stationing will focus on acquiring linguists at the 2/2 or higher proficiency level. Prior service soldiers, E-3 through E-8 or O-1 through O-3, who are fluent at the 2/2 or better level in a specified language, are eligible for assignment. Approximately 60% of the future USAR and ARNG linguist units will consist of 97Ls—the new RC-unique translator-interpreter military occupational specialties (MOS). The balance will consist of human intelligence and signals intelligence language-coded MOSs.

Basic information regarding the new USAR linguist companies appears below:

Unit	HQ Location	Assigned Languages
265th MI Company	Fort Dix, NJ	AD QB KP
272d MI Company	Bell, CA	CM JA KP
283d MI Company	St. Paul, MN	AD RU TU
900th MI Company	Austin, TX	PL CX SC RU
356th MI Company	Atlanta, GA	PF AD RU
351st MI Company	Olathe, KS	QB GM FR PQ
906th MI Company	Detroit, MI	AD PF RU

LEGEND:

AD - Arabic Modern Standard
CM - Chinese (Mandarin)
CX - Czech
FR - French
GM - German
JA - Japanese
KP - Korean
PF - Persian Farsi
PL - Polish
PQ - Portugese (Brazilian)
RU - Russian
SC - Serbo-Croatian
QB - Spanish
TU - Turkish

LETTERS

(Continued from page 5)

computers running the FAISS software throughout the division. There are several advantages to this approach:

(1) Little cost. FAISS software runs on 486 color notebook or desktop computers, no special hardware is required and FAISS software is owned by the Army.

(2) Limited training and maintenance necessary. FAISS software is Windows based and can be learned in a few days. Since the computers are commercial systems they can be maintained just like other notebook and desktop computers in the division. The software and hardware do not require civilian technical support.

(3) Multiple users. Dozens of users can query the enemy data base at the same time and multiple users can input to the data base. You could equip the DTAC, G2 operations section, brigade S2s, DREAR, and separate battalions with FAISS software and color notebook computers for less than the cost of two ASAS-RWS.

(4) LAN capable. Since the software runs on computers using Microsoft Windows For Workgroups or Windows NT, the computers can easily be linked together in a local area network which provides a rapid and simple method to share intelligence.

(5) Fast. FAISS software running on a 486 DX2 computer can find 2,500 records in less than a minute. FAISS software running on a 90-MHz Pentium can find 2,500 records in less than 30 seconds. FAISS software running on a 90-MHz Pentium can display a digitized color map with a 100-km horizontal field of view and 200 enemy units in less than 3 minutes.

(6) National Guard support. The National Guard will continue to use FAISS software for the next ten years. Building a link between ASAS and FAISS software will enable the National Guard brigades to more effectively operate with active-duty divisions equipped with ASAS.

(7) Notebook computer capable. The FAISS software runs great on color notebook computers. Color notebooks are ideal for brigades, battalions, and light infantry units.

(8) Excellent graphic INTSUMs. The FAISS software uses digitized maps that are produced by DMA to provide a color map background and displays up to ten overlays (each with a different color) based on queries to the data base. Enemy and friendly sketches can be overlaid on the map also. These graphic INTSUMs can them be further manipulated and printed using any Windows-based graphic software (such as Powerpoint or Harvard Graphics).

(9) Friendly data base. The G3 operations section can input friendly unit locations to a friendly data base in the FAISS software. This data base can then be shown in conjunction with the enemy data base and shared throughout the division. This is a key step to truly automating battle tracking—the enemy is only one-half of the equation for the commander.

Enabling ASAS to download data bases to computers running the FAISS software would be an excellent solution to the problem of sharing and disseminating intelligence. It is a solution that could be inexpensively and quickly implemented. I urge the Intelligence Center and and the ASAS program manager to investigate this solution further. At 1st Infantry Division (Mechanized) we have been very successful in using the FAISS software to rapidly disseminate intelligence throughout the division.

CW2 BRUCE A. PHILLIPS
Fort Riley, KS

Implementation of FM 100-60 Opposing Forces Series

On 9 January 1995, the U.S. Army Training and Doctrine Command (TRADOC) Deputy Chief of Staff for Intelligence rescinded the FM 100-2 series field manuals (FMs)—the Army's basic unclassified references on Soviet tactics and equipment. The new FM 100-60 series FMs on heavy and light opposing forces (OPFOR) supersede the FM 100-2 series and constitute the Army's unclassified references on threat. The FM 100-60 series creates a capabilities-based OPFOR that relies on tactical norms to create a less predictable OPFOR.

The FM 100-60 series includes:

- ☐ **FM 100-60, Heavy Opposing Force Organizational Guide.**
- ☐ **FM-100-61, Heavy Opposing Force Operational Art.**
- ☐ **FM 100-62, Heavy Opposing Force Tactics.**
- ☐ **FM 100-63, Light Opposing Force Organizational Guide.**
- ☐ **FM 100-64, Light Opposing Force Operations and Tactics.**
- ☐ **FM 100-65, Opposing Force Equipment Guide.**
- ☐ **FM 100-66, Operations Other Than War Opposing Forces.**

The Department of Army will publish these FMs over the next year. The interim publication is the TRADOC 350-series Opposing Force Pamphlets which mirror the FM 100-60 series.

The National Training Center and the Joint Readiness Training Center will begin to use the TRADOC 350-series for May 1995 and subsequent rotations. The Battle Command Training Program currently uses the TRADOC 350-series of pamphlets.

Units that do not have a copy of the TRADOC 350-series should first contact their G2 Training Office. TRADOC completed distribution of the pamphlets in late 1994. Units can request pamphlets from the TRADOC ODSCINT, Threat Support Division, ATTN: ATZL-CST, Fort Leavenworth, KS 66027-5310 or call DSN 552-7907/4288. The Army will distribute these FMs through the usual publication distribution system.

Joint Intelligence Courses

The Navy and Marine Corps Intelligence Training Center (NMITC) in Virginia Beach, Virginia offers two outstanding courses on joint intelligence: the Joint Task Force Intelligence Manager's Course (JTFIMC) and the Joint IntelligenceCenter (JIC) Course. The curriculum at both courses is demanding, extensive, and taught at a rapid pace. A TS clearance and SCI access is required for both courses.

The Joint Task Force Intelligence Manager's Course

This two-week course (12 calendar/10 training days) trains senior intelligence personnel (O-3 to O-6 and E-7 through CWO) designated to support Joint Task Forces (JTFs) and their components on the joint intelligence methods to support the theater commander-in-chief's two-tiered warfighting strategy. It will enable JTF J2 personnel at all levels to make optimum use of national, joint, and component intelligence resources while properly employing joint intelligence doctrine and strategies. A mobile training team can export the course.

JTFIMC subjects include—

- ☐ Joint principles.
- ☐ Component organization and doctrine.
- ☐ JTF organization and intelligence operations.
- ☐ National and Service-component intelligence support.
- ☐ JTF intelligence collection, dissemination, targeting, communications, and systems.

Preference for this course is given to students who will support ad hoc JTFs. An intelligence background is mandatory as the course assumes a familiarity with intelligence analysis and methodology.

You may request quotas through NMITC, Navy Integrated Training Resource Automated System (NITRAS) at DSN 433-8211, Commercial (804) 433-8211. Point of contact for the course is Lieutenant Commander Poole, at DSN 433-8330, Commercial (804) 433-8330, or FAX 433-8331.

The Joint Intelligence Center Course

This intensive four-week curriculum for personnel from all Services, E-5 and above, assigned to joint intelligence billets is designed to provide the essential skills required to conduct effective all-source intelligence analysis. An intelligence background would be useful, though it is not required for this course.

The subject matter is broken down into four general categories (one week per category):

- ☐ **The first week:** furnishes the student with the fundamental information required to function in the joint warfare environment. Lessons consist of instruction on security considerations; joint intelligence doctrine; and the structure, missions and responsibilities of various organizations at national, theater, component, and tactical levels of command.
- ☐ **The second week:** focuses on joint intelligence collection, tasking, and information management. Guest lecturers emphasize understanding the various intelligence disciplines (e.g., HUMINT, IMINT, SIGINT) and how to task and best use them to support the Joint Task Force commander.
- ☐ **The third week:** surveys satellite communications networks and joint and component intelligence systems architectures. The primary intent is enhancing the student's awareness of own Service and other Service intelligence analysis and support systems so that they may better employ all assets. Guest speakers from all Services discuss the primary capabilities, uses, and interoperability of the systems.
- ☐ **The fourth week:** involves a four-day, joint-Service, watch-standing practical exercise. The major objective is to encourage the student to apply the knowledge and skills they developed during the previous three weeks. Through the use of simulated message traffic, the exercise emphasizes team skills, organization, individual intelligence analysis, and briefing techniques.

Programmed class dates for the JIC Course in fiscal year 1995 are:

95010	**17 Oct 94**	**- 11 Nov 94**
95020	**25 Jan 95**	**- 17 Feb 95**
95030	**06 Mar 95**	**- 31 Mar 95**
95040	**24 Mar 95**	**- 19 May 95**
95050	**05 Jun 95**	**- 30 Jun 95**
95060	**11 Jul 95**	**- 04 Aug 95**

For quotas contact LT Jack Schumaker, DSN 433-8330, Commercial (804) 433-8330, or FAX 433-8331.

PROFESSIONAL READER

The Gentleman Spy: The Life of Allen Dulles by Peter Grose (New York: Houghton Mifflin Company, 1994), 641 pages, $30.

The legacy of Allen Dulles, the fifth Director of Central Intelligence (DCI) is controversial. Although acclaimed as "the greatest United States professional intelligence officer of his time" (by Sir Kenneth Strong, Eisenhower's J2) and an "artist of intelligence" (by MG William Donovan, head of the Office of Strategic Services [OSS]), he also drew criticism. He was blamed, at least in part, for the clumsy handling of the Soviet capture of a U-2 "spy plane" in 1960 and the CIA's bungled Bay of Pigs invasion of Cuba in 1961. Scandals that rocked the CIA in the 1970s (e.g., foreign leader assassination plans) originated in his tenure.

Armed only with a passing knowledge of Allen Dulles' life, I was struck by his extensive intelligence tenure before joining the CIA and his very public prominence throughout his professional life. As a junior diplomat in World War I in Europe, Dulles developed his own informal circle of well-connected sources. Between the world wars, while practicing law in a prominent Wall Street firm (with an international clientele), Dulles established himself as a national authority on foreign affairs. He joined the OSS in 1942. Dulles played a key role in the OSS's New York operations, laying the groundwork for OSS European espionage nets. In Switzerland, he organized and ran an extensive espionage network. As a private citizen after WW II, Dulles was influential as he lobbyed Congress and the President to form a central intelligence service.

Peter Grose, a prominent foreign affairs journalist and former senior State Department official, excels in recounting the complex life of Allen Dulles. Last year the CIA released the last of his personal papers. In addition, the CIA responded to a 1989 Freedom of Information Act request and released an extensive history of Dulles' career. Grose also drew on Dulles family papers and numerous interviews with his former colleagues. The result, this book, is a detailed, well-documented, and highly readable account.

There is much in Grose's work to interest intelligence professionals. Foremost are Grose's accounts of Dulles' work building espionage networks—especially his exploits in Switzerland. There, instead of working undercover, Dulles established himself as an almost overt U.S. government representative. Dulles proved masterful at cultivating and evaluating human sources.

As the United States grapples with the proper role and structure of its intelligence community, Dulles' biography provides valuable "food for thought" including detailed debates on—

1. Combining clandestine and covert collectors into the same organization.
2. The proper relationship between the DCI and the President.
3. Whether the Department of Defence or CIA should conduct covert operations.
4. The effectiveness of using covert operations to overturn unfriendly governments.

Allen Dulles more than any other individual is responsible for the current structure, mission, and character of the CIA and our intelligence community. Dulles is a worthy biographical subject. This biography is an important addition to intelligence professional literature.

Lincoln Krause
Alexandria, VA

Spy Catchers of the U.S. Army in the War with Japan (The Unfinished Story of the Counterintelligence Corps) by Duval A. Edwards (Gig Harbor, Washington: Red Apple Publishing, 1994), 299 pages, $17 plus $2 shipping.

This book is one of the very few books ever written about the Counterintelligence Corps (CIC). It starts just before WW II and runs through the early Cold War years. There have been a few "I was there and this is what I saw" books but only one other book covers such a wide range of activities—**America's Secret Army** by Botting and Sayer.

Mr. Edwards started amassing material for this book long ago, after he received the thirty-volume work by Major Bray. Major Bray, while stationed at Fort Holabird, Maryland, for several years in the late 1950s, put together a mountain of material.

Many people provided accounts that "fleshed out" Major Bray's material. The author cleverly wove it all into a fascinating bit of chronology. The book is full of interesting and detailed "bigger than life" incidents.

One of the most gripping accounts is the story of Richard Sakakidai and Arthur Komori (both Niseis). In early 1941, almost a year before Pearl Harbor, they enlisted in the Army. Tabbed for assignment to the Corps of Intelligence Police (predecessor to the CIC) they had a brief counterintelligence training tour, then deployed to the Philippines.

After arriving, their assignment was to track the Japanese community in Manila. They worked undercover in the Japanese community, identifying numbers of Japanese covert agents operating as news people, businessmen, etc. Later Sakakidai interpreted for General Beebe, aide to General Wainright. This led to his imprisonment by the Japanese for treason after the Philippines fell. An earlier request by his mother to renounce his dual citizenship, cleared Sakakidai of treason and saved his life.

Sakakidai eventually gained release and found employment in the office and home of a Japanese colonel. He learned a great deal about proposed troop movements, reinforcements, and future plans. Then he was able to radio this mass of information to MacArthur's headquarters.

This material is now about fifty years old—so why should intelligence practitioners care? The CIC has since disappeared and counterintelligence has gone downhill. Those in the intelligence community today should not forget the lessons of WW II (the last time we conducted total war)—they just might come in handy some day!

Arthur S. Hurlburt
Medford, ME

Silent Warriors of World War II: The Alamo Scouts Behind Japanese Lines by Lance Q. Zedric (Ventura, California: Pathfinder Publishing, 1994); 282 pages, $22.95.

It seems unlikely that after fifty years new information would surface concerning WW II—but Lance Zedric breaks new ground in this book. History has overlooked the Alamo Scouts except for a few historians and military writers who occasionally mention them in articles, books, and dissertations dealing with broader subjects. Finally, the Alamo Scouts receive the recognition they deserve for their two years of service behind the lines.

General Krueger, Commander, Sixth Army, created the Alamo Scouts because "he was determined to have a first rate unit at his disposal." He witnessed what kind of operation resulted from poor intelligence during the Kiska invasion fiasco and decided that it would not happen to him. In November 1943, Krueger activated the Sixth Army Special Reconnaissance Unit—the Alamo Scouts. He established a training center that conducted eight six-week classes over the next two years. The Alamo Scouts Training Center moved forward as Sixth Army conquered territory in New Guinea, Leyte, and Luzon.

Alamo Scout missions form the centerpiece of the book. These one hundred plus missions run the special operations gamut, from intelligence/reconnaissance patrols to raids on POW camps and training and leading local guerrilla units.

Zedric spent much time interviewing participants of the many missions and puts the "up close and personal" feeling in his writing. He also paints the larger picture, so we understand how the Alamo Scouts' mission fit into the Sixth Army plan.

The Alamo Scouts were there to collect information, not to fight the Japanese. Of all the units in Sixth Army, they were first—first to see, first to know, first to report, and sometimes first to make contact. Zedric makes all of this come alive.

Whatever your plans for buying new books, put **Silent Warriors of World War II** on the top of your list.

Michael F. Dilley
Davidsonville, MD

104th Military Intelligence Battalion

Oriental blue and silver gray are the colors associated with Military Intelligence. The crossed swords attest to the unit's readiness; the eagle, wide-eyed and alert, is symbolic of watchfulness. The bolt of lightning above refers to the battalion's electronic warfare capability; together the symbols express the words of the motto and the unit's basic mission and responsibility.

The mission of the 104th Military Intelligence Battalion is to provide intelligence and electronic warfare (IEW) and counterintelligence (CI) support to 4th Infantry Division (Mechanized) combat operations. The battalion, and its predecessor units, has accomplished this mission since World War II.

The lineage of the 104th derives from the 4th Military Intelligence and the 374th Army Security Agency (ASA) Companies. The 4th MI Company organized in January 1944, as the 4th Counter Intelligence Corps Detachment, was subordinate to the 4th Infantry Division. It participated in the Normandy, Northern France, Rhineland, Ardennes-Alsace, and Central Europe campaigns. In 1969 the unit became the 4th MI Company.

The 374th ASA Company was activated as Charlie Company, 303d Army Security Agency Battalion at Fort Lewis. Redesignated the 374th ASA Company in 1966, it deactivated in 1972. The 374th reactivated at Fort Carson in May 1977.

Both the 374th and 4th MI Companies served in Vietnam. Both companies received campaign credit for Counteroffensive (Phases II through VII), Tet Counteroffensive and Tet 1969 Counteroffensive, Sanctuary Counteroffensive, and the Spring-Fall and Winter-Spring 1970 Campaigns. The 374th received three Meritorious Unit Commendations, three Republic of Vietnam Crosses of Gallantry with Palm decorations, and one Civil Action Honor Medal, First Class. The 4th MI Company received a Meritorious Unit Commendation and a Republic of Vietnam Cross of Gallantry with Palm.

The Army constituted the 104th MI Battalion (CEWI) on 16 September 1980 and assigned it to the 4th Infantry Division at Fort Carson, Colorado. The 374th became Alpha Company while the 4th MI Company became Bravo Company. Since then the battalion has continued the tradition of excellence established by the 4th MI and 374th ASA Companies. The battalion truly functions in a multidiscipline arena, combining all facets of signals, imagery, and human intelligence into finished intelligence products supporting the warfighter. The 104th continues to range far and wide, escorting division assets through the perils of battle—**OUTRIDERS!**

Commander
U.S. Army Intelligence Center & Fort Huachuca
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