

## CHAPTER 1

### INTELLIGENCE AND ELECTRONIC WARFARE SUPPORT TO MILITARY OPERATIONS

*The times we live in are times of profound change, dramatic and fundamental change - political, ideological, and technical. We must adapt to that change, and we must grow.*

—GEN Gordan R. Sullivan, 23 May 1993

#### MISSION OF ARMY INTELLIGENCE

The mission of Army intelligence is to provide timely, relevant, accurate, and synchronized IEW support to tactical, operational, and strategic commanders across the range of military operations. In war, IEW operations support the winning of battles and campaigns. In OOTW, IEW operations support the promotion of peace, the resolution of conflict, and the deterrence of war. These operations reduce uncertainty and risk to US Forces and permit the effective application of force.

#### IEW IN THE FORCE PROJECTION ARMY

The post-Cold War Army is a force projection Army. Continental United States (CONUS)-based with a limited forward presence, the Army must be capable of rapidly deploying anywhere in the world, operating in a joint or combined environment, and defeating regional threats on the battlefield or conducting OOTW. IEW is fundamental to effective planning, security, and execution of force projection operations.

IEW operations have changed fundamentally from those of the Cold War model. The environment in which the Army now operates requires IEW support based on the mission rather than on a monolithic threat. During the Cold War era, intelligence developed into a threat-based system upon which the Army based its doctrine, training, and modernization. For over four decades, the “threat” was the Soviet Union. The Army developed organizations, systems, tactics, and procedures needed to conduct defensive operations against Soviet and Warsaw Pact forces attacking through central Europe. Our defense was built upon the movement of heavy corps from in-theater garrisons to general defense positions with follow-on forces arriving later from the CONUS. Movement and support of the corps would occur within a robust communication zone containing extensive communications and logistics infrastructures. From alert through the termination of hostilities, tactical IEW units were to be the principal sources of tactical intelligence flowing up to divisions, corps, and theater. Intelligence, in general, would flow from the ground up to higher echelons. And, because the US focused the national intelligence effort on our nation’s most likely threat, we

possessed in-depth, continuous, and nearly automatic intelligence on the forces of the Soviet Union. From the two premises of tactical intelligence coming from the ground up and in-depth knowledge on the threat, we built our entire vision for IEW support.

In the force projection Army, mission-based intelligence focuses on developing broad baseline knowledge of potential threats and operational environments supporting numerous plans and likely contingency missions. From this broad baseline, commanders possess the capability to prioritize, focus, and surge the intelligence system supporting force projection operations. The commander plays a key role in mission-based intelligence and intelligence readiness. Since there is no longer one threat facing the US, command involvement is essential in ensuring that the intelligence system is focused on the commander's top contingencies. Force projection operations build force levels from the bottom up vice top down as during the Cold War. IEW assets are tailored to meet the requirements of the mission and deployment sequence. In force projection operations, commanders depend on small, deployable teams with access to national and joint intelligence. Intelligence in the initial stages of the operation will flow from higher to lower. The size and capabilities of follow-on IEW assets will be dictated by the situation and the commander's concept of operation. Figure 1-1 illustrates the transition from Cold War era to force projection era intelligence.

The nature of force projection operations and mission-based intelligence requires commanders to redefine intelligence readiness. Intelligence readiness means that MI must develop broad knowledge on priority contingency areas, update those data bases daily, and be prepared to surge in support of emerging missions. Commanders and G2s (S2s) must direct the intelligence effort daily to ensure the data bases will be there upon alert to support contingency planning and execution. If our divisions, corps, and theater forces stand ready to project force anywhere in several potential contingencies, then it is essential that their intelligence support be at the same or higher level of readiness. To maintain that level of readiness, MI must provide commanders with routine, direct, and habitual links into the intelligence system to provide and, perhaps more important, to focus intelligence on their tactical and operational needs early.

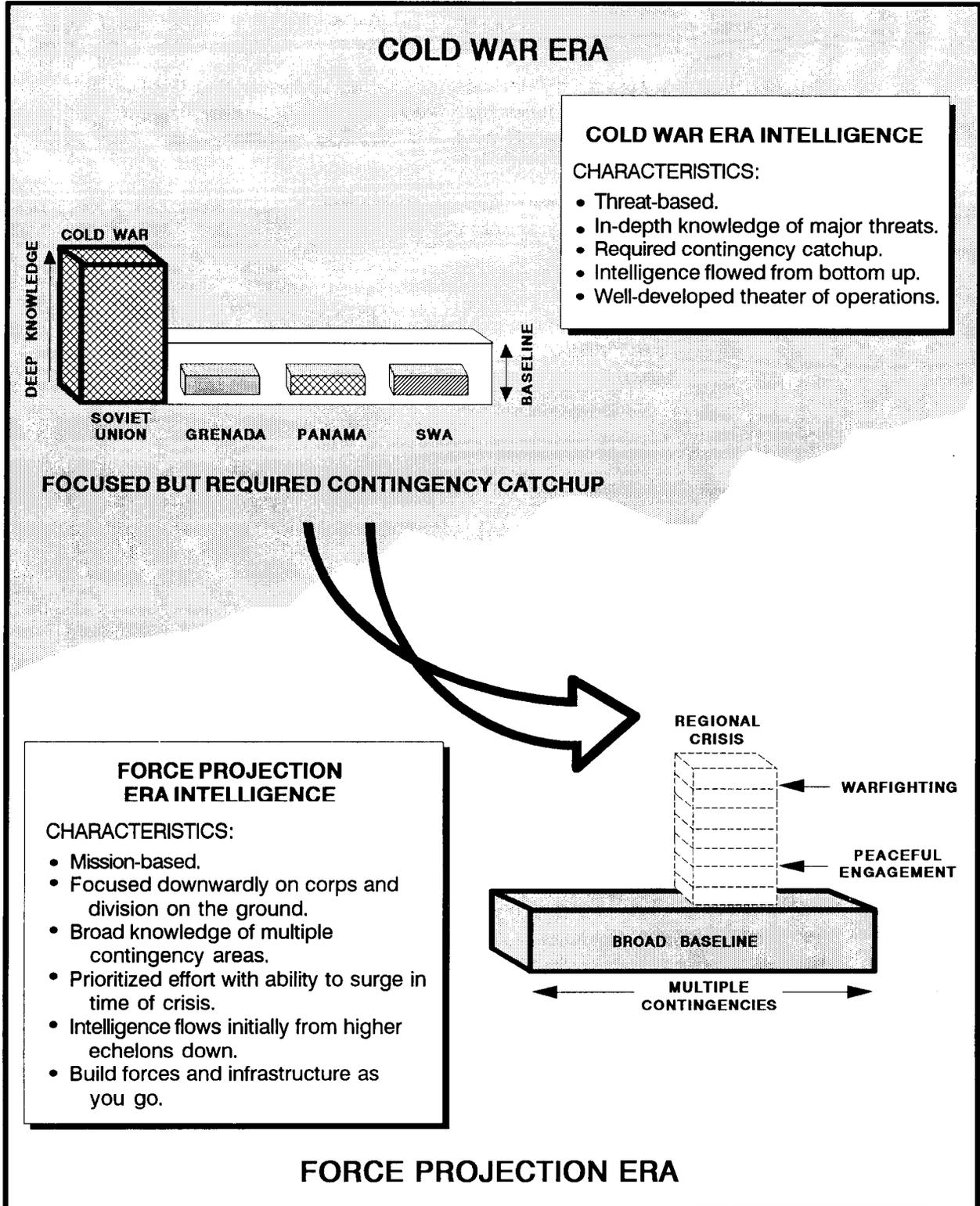


Figure 1-1. Transition from Cold War era to force projection era intelligence.

## PRINCIPLES OF FORCE PROJECTION IEW

Successful force projection IEW support is based on understanding five key principles: the commander drives intelligence; intelligence synchronization; split-based operations; tactical tailoring; and broadcast dissemination. See Figure 1-2.

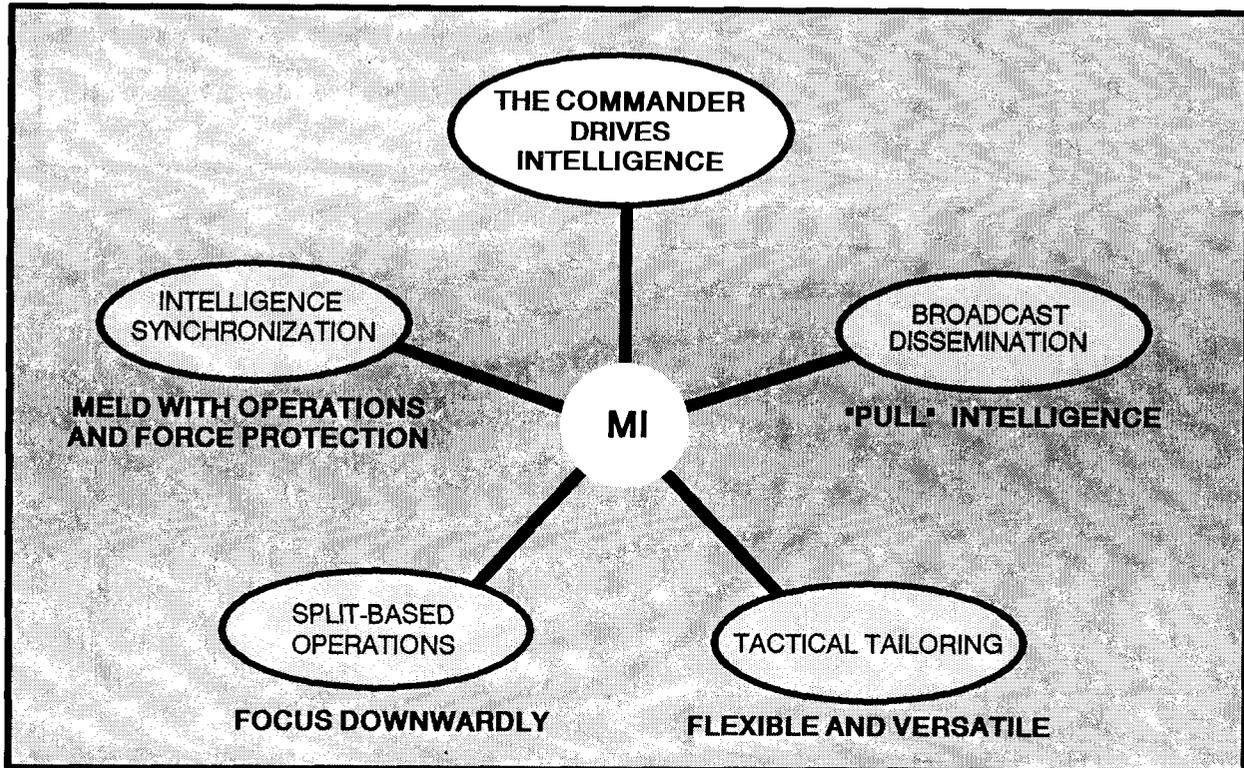


Figure 1-2. Principles of force projection IEW operations.

### The Commander Drives Intelligence

The commander's role in IEW, not just when the crisis begins, but well before and throughout the operation, is central to the success or failure of IEW support in force projection operations. The commander must take an active role in focusing, integrating, and training the intelligence system. He must focus the effort and ensure it is responsive to his information requirements (IR) and those of his subordinates. As shown in Figure 1-3, the commander must —

- Identify, clearly articulate, and prioritize intelligence and targeting requirements.
- Understand the capabilities and limitations of the Intelligence BOS.
- Know how to leverage and employ the intelligence system to its full potential.

- Broker subordinates' information and resource requirements.
- Meld the Intelligence BOS into the total combined arms effort.

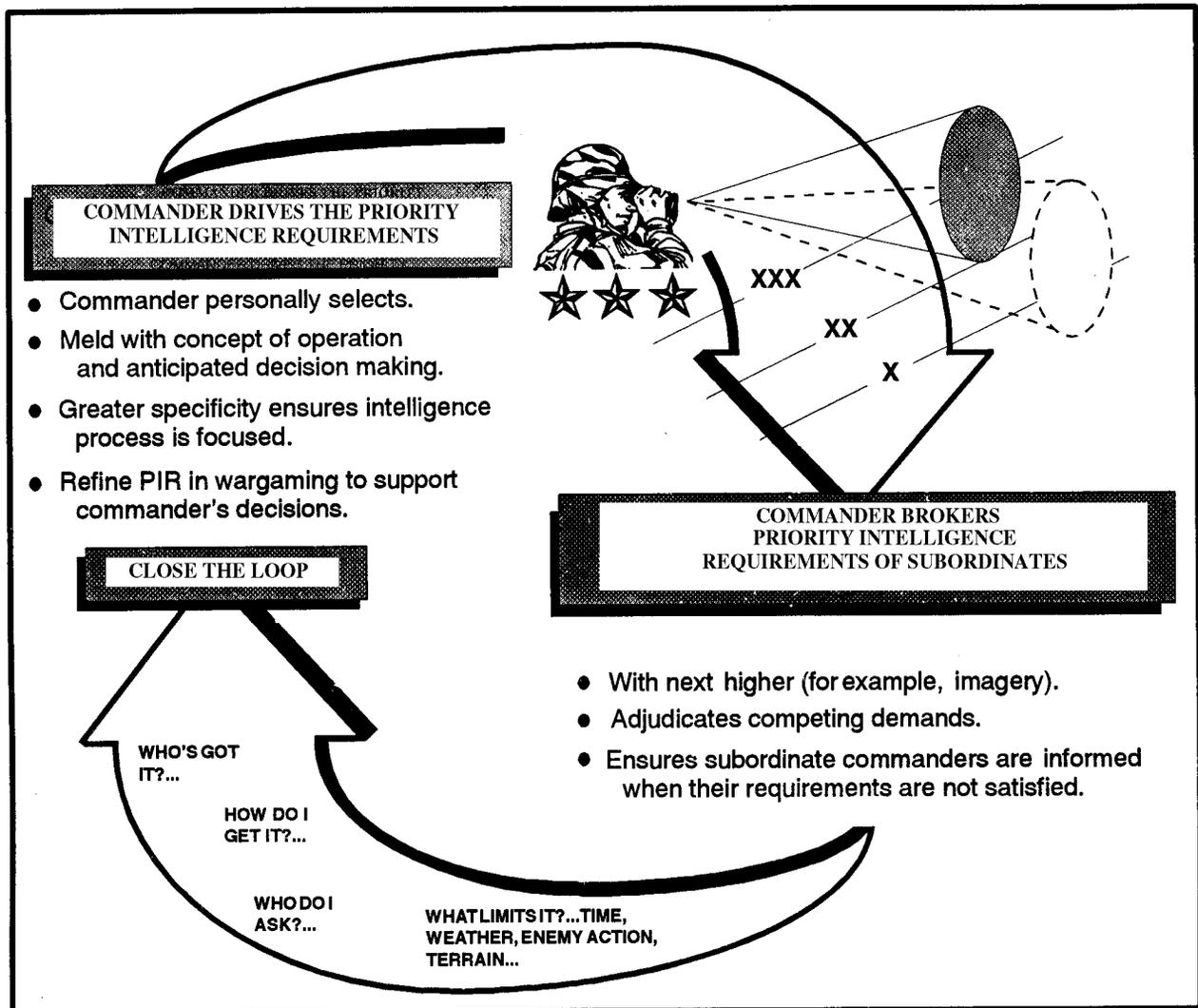
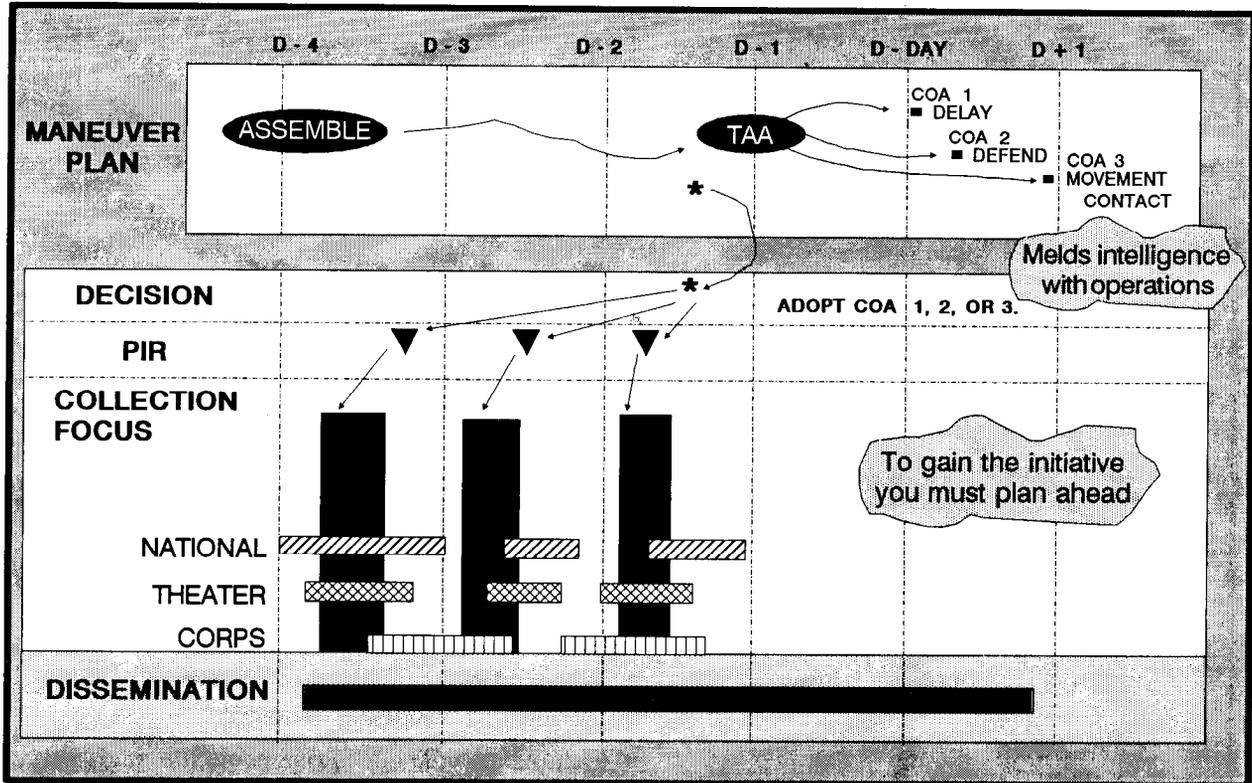


Figure 1-3. The commander drives intelligence.

**Intelligence Synchronization:**

Intelligence synchronization ensures IEW operations are linked to the commander's requirements and respond in time to influence decisions and operations. In the synchronization process, the G2 (S2) takes the commander's priority intelligence requirements (PIR) and backward plans to ensure that collection and production efforts are orchestrated with the operation, and deliver intelligence when required. The collection manager ensures specific orders and requests (SORs) fully support all PIR and IR. The collection manager also synchronizes collection and reporting to deliver relevant information, on time, to support operational decisions. Intelligence synchronization ensures the MI unit commander has the time, guidance, and resources to execute IEW operations. Intelligence synchronization is a

continuous process which keeps the intelligence cycle and IEW operations tied to the commander's critical decisions and concept of operations. See Figure 1-4. For more information on intelligence synchronization, refer to FM 34-2 and FM 34-130.



**Figure 1-4. Intelligence synchronization.**

**Split-based Operations**

Split-based operations are an integral part of IEW support to force projection operations. In split-based operations, the commander deploys small, flexible, tailored IEW organizations with access to intelligence data bases and systems outside the area of operations (AO), particularly national systems. Split-basing takes advantage of direct broadcast technology from collection platforms and assured intelligence communications to provide commanders with continuous, relevant, and timely IEW support during all stages of force projection operations. See Figure 1-5.

Organizations like the Deployable Intelligence Support Element (DISE) support split-based operations by bringing together communications capability, automated intelligence fusion systems, and broadcast downlinks in a scalable package able to deploy with the entry force. It is not a specific piece of equipment or a particular configuration of equipment. It is a flexible organization able to support any type of ground force commander whether from Army, joint, or combined forces. The DISE provides the commander with a link from his forward deployed force to an intelligence support base located in CONUS or other locations outside the AO.

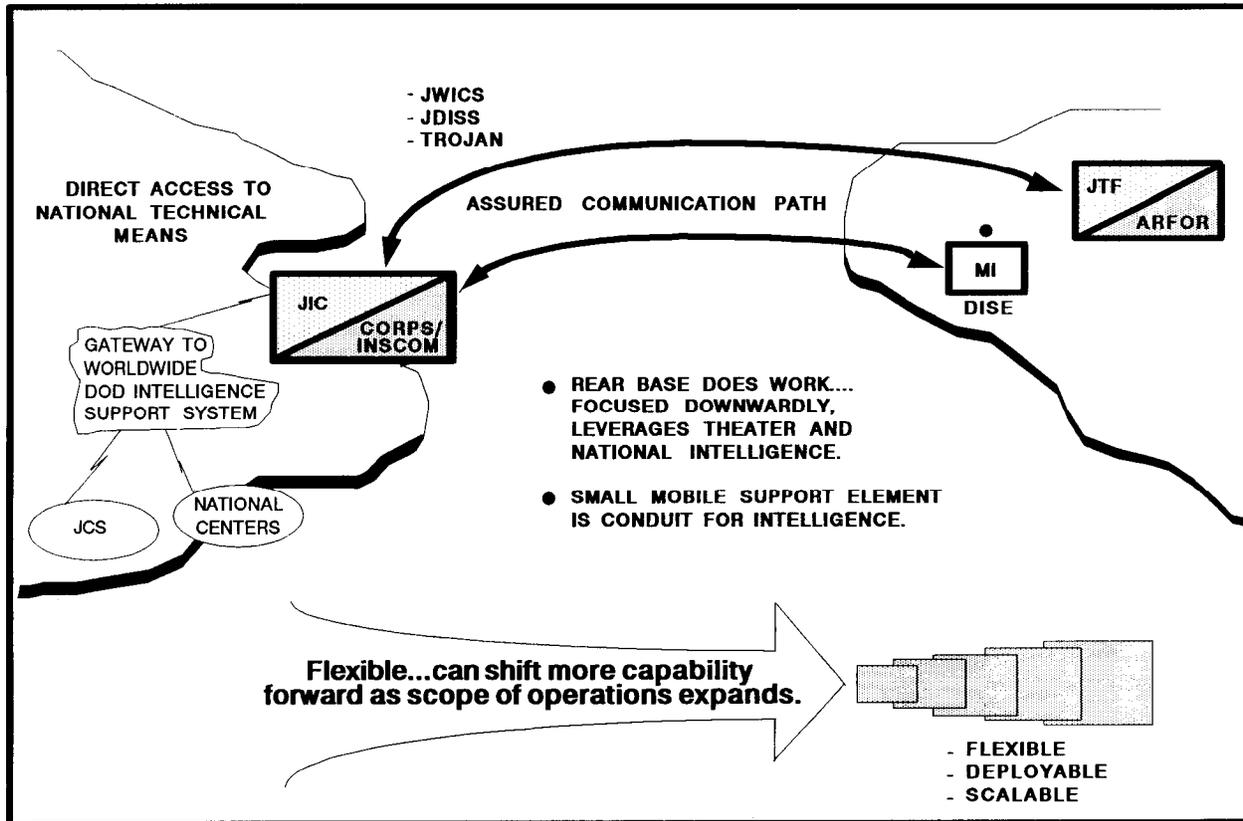


Figure 1-5. Split-based operations.

Split-based operations allow uncommitted IEW assets, including MDCI assets, to support the deployed force through remote collection, processing and analysis, and TENCAP operations in garrison, or from secure locations outside the AO. This includes intelligence support of units as they deploy from garrison to port of debarkation (POD) and onward to the AO. The support relationship established between deployed and uncommitted assets in turn facilitates the smooth integration of follow-on assets once they deploy to theater. The deployment of these follow-on assets allows the commander to transition from IEW support provided primarily by national assets to support from theater or organic assets within the AO. With in-theater assets, the commander can focus the intelligence effort to the resolution required for tactical operations while receiving the unique support available only from national means.

Tactical Tailoring:

In force projection operations, the commander tactically tailors IEW support for each contingency. Commanders should attempt to maintain unit integrity and established command relationships to the extent possible; however, deployment of a more traditional unit such as a divisional MI battalion in full may not be the best organization for the mission. Tailoring allows the commander to build a more efficient, mission specific force by—

- Assessing IEW mission requirements. This includes determining the capabilities of remotely based and joint intelligence collection assets to support the mission; identifying the composition of the IEW force based on mission, enemy, troops, terrain and weather, and time available (METT-T); determining communications and processing requirements; and planning the deployment sequence of IEW assets based on mission, strategic lift resources, and host nation support.
- Developing scalable IEW support packages like the DISE with communications, processing, and downlink assets for top priority contingency missions. Employment of these packages should be practiced often to refine force resourcing and tailoring procedures, load plans, communications connectivity, and support relationships.
- Tailoring the Intelligence BOS to ensure it provides the commander with accurate and responsive intelligence. The intelligence system should cover the entire width and depth of the battle space and area of interest (AI) throughout the duration of the operation, at the resolution required by commanders at each echelon.
- Deploying early, an IEW package that is portable, logistically sustainable, and sufficient to conduct operations for the short-term. Sufficiency in the short-term includes being prepared to provide immediate IEW support for combat operations and force protection.
- Integrating IEW assets into the deployment flow early. Depending on the availability of information and threat capabilities, commanders must phase in intelligence personnel and, equipment that offer redundancy and that serve as the cornerstone for assets that “arrive in the theater later. These initial “building blocks” are critical to early success and follow-on capabilities. Follow-on IEW forces should enhance the capabilities of in-theater assets and satisfy the commander’s long-term concerns.
- Maintaining habitual peacetime IEW support relationships and accesses between the forward deployed intelligence element and its higher echelon intelligence organization. This allows forward deployed assets to pull from their “normal” intelligence sources between the predeployment and operations stages of force projection. This reduces the possibility of intelligence shortfalls which could arise from reliance on evolving intelligence organizations. For example, a CONUS-based corps may commit a maneuver brigade as part of a forward deployed joint task force (JTF). The deployed brigade could continue to receive support through a DISE from the CON US-based analysis and control element (ACE) of its parent division in addition to support from the JTF Joint Intelligence Center (JIC).
- Maximizing intelligence support from the host nation by establishing, if possible, liaison with host nation intelligence organizations in peacetime.

Figure 1-6 provides a sketch of some IEW tactical tailoring considerations.

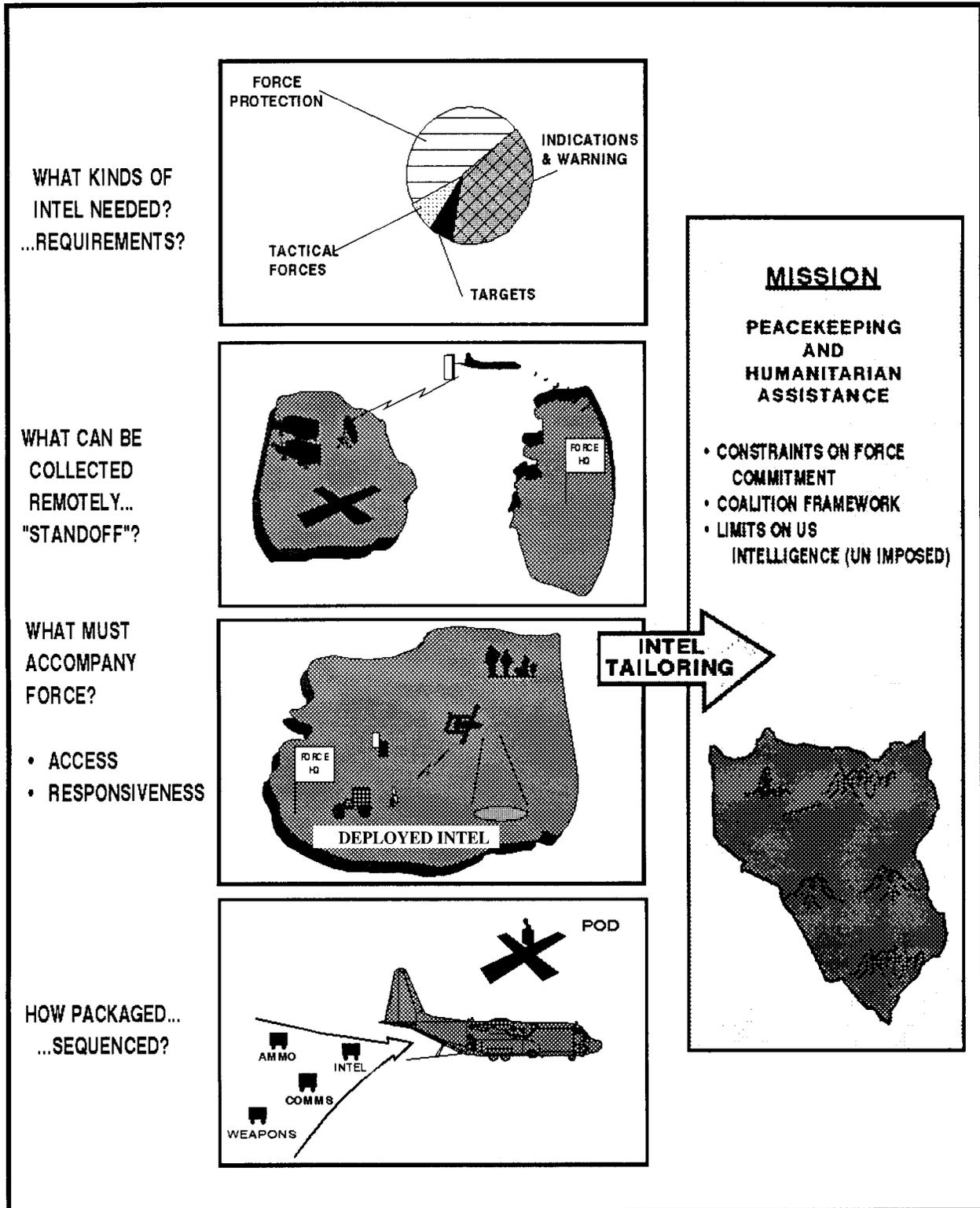
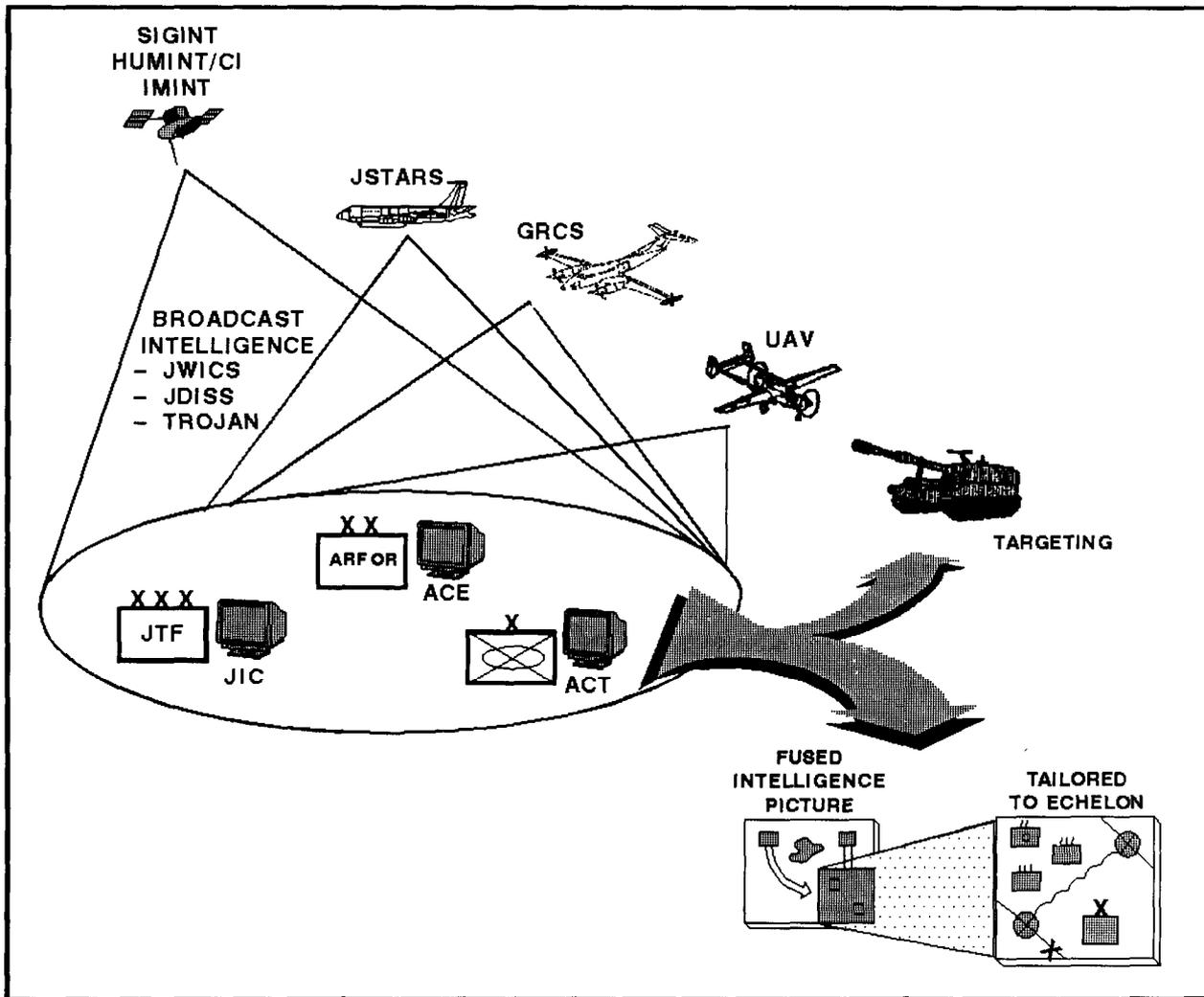


Figure 1-6. IEW tactical tailoring considerations.

**Broadcast Dissemination:**

Broadcast dissemination of intelligence and targeting information is an important element in providing commanders at multiple echelons with a common intelligence picture of the battlefield. Broadcasting facilitates the direct or skip echelon “push” of information down to commanders in the field. Use of broadcast technology also reduces the number of collection sensors, processors, and personnel needed to support these operations. More importantly, broadcasting intelligence and targeting information directly to multiple terminals, eliminates bottlenecks inherent in point-to-point communications and provides all echelons common sources from which to “pull” information. Some of the products available through broadcast systems are TENCAP imagery and targeting information, Joint STARS radar imagery, UAV video, and Air Force RC135 (Rivet Joint) and Army GUARDRAIL SIGINT reports. Host terminals, when tied to broadcast terminals, are capable of providing filtered, processed, and tailored intelligence to satisfy specific intelligence and targeting requirements. See Figure 1-7.



**Figure 1-7. Broadcast intelligence and targeting data dissemination.**

The ACE is the commander's primary organization for pulling information from broadcast systems and fusing it into tailored intelligence and targeting information. Through its capability to rapidly pull, process, and disseminate intelligence, the ACE provides the commander with the means to focus and synchronize the intelligence system with his intent and concept of operation. In addition, the ACEs at brigade, division, corps, and theater form a seamless bridge linking the tactical commander with higher echelon organizations where intelligence data bases and knowledge reside.

## INTELLIGENCE BATTLEFIELD OPERATING SYSTEM

Intelligence supports the Army as a whole through the Intelligence BOS. The Intelligence BOS is a flexible and tailorable architecture of procedures, personnel, organizations, and equipment that responds to the intelligence needs of commanders at all echelons. The Intelligence BOS architecture provides specific intelligence and communications structures at each echelon from the national level through the tactical level. These structures include intelligence organizations, systems, and procedures for collecting, processing, analyzing, and delivering intelligence to decision makers who need it. Effective communications connectivity and automation are essential components of this architecture.

Since no echelon has all the organic intelligence capabilities it needs to fully support the commander, IEW assets must be employed to support the needs of all echelons. This support is comprehensive and reaches across the range of military operations and levels of intelligence. It is the collective entity the force commander uses to produce the intelligence he needs to win on the battlefield. The Intelligence BOS is built upon the premise that the whole is greater than the sum of its parts. It is a combination of space, airborne, and ground-based systems providing the most comprehensive intelligence possible. The Intelligence BOS is always engaged in supporting the commander in war and OOTW.

During force projection operations, MI uses Intelligence BOS procedures and architecture, established during peacetime, to ensure that the force commander is supported with accurate and responsive intelligence from predeployment through redeployment.

## PRIMARY FEATURES OF THE INTELLIGENCE BOS

There are seven primary features of the Intelligence BOS. Each is described below.

### **Always Engaged:**

The Intelligence BOS is always engaged. Through continuous peacetime intelligence operations, commanders ensure collection, processing, analysis, and dissemination infrastructure is in place and prepared to provide intelligence support throughout the range of military operations. Early intelligence preparation is critical to the commander's decision making and planning process for force projection operations. The commander and

G2 (S2) must assess each contingency to determine intelligence requirements and develop a plan for filling intelligence voids. This primary feature is tempered, however, by the imperative to prioritize efforts and prepare thoroughly for top priority contingency areas.

**Downwardly Focused:**

Commanders and MI organizations must focus intelligence downwardly to the commander on the ground. Intelligence should get to the subordinate commander, when requested, in a usable format, and focused on his echelon and battle space. Commanders and MI leaders at higher echelons should anticipate the intelligence needs of lower echelons, and “push” tailored intelligence support down to them. Staffs at each echelon should produce intelligence reports (INTREPs) and other products tailored to the needs of their subordinate units. To the extent possible, INTREPs and intelligence summaries (INTSUMs) should be in graphic format with enough text to reduce confusion. Higher echelons must also facilitate the “pull” of intelligence from their data bases for both bulk-data requests and specific queries. The lowest echelons should be able to “skip” echelons to access the data bases they require to support the commander.

**Simultaneously Supported:**

Advances in dissemination capabilities allow the Intelligence BOS to provide commanders at multiple echelons with a common picture of the battlefield derived from national, joint, and Army collection assets. In addition, the connectivity available through the Intelligence BOS architecture enables commanders to directly access and “pull” critical intelligence products from different echelons. Thus, while the IEW assets of a corps are focused on the corps commander’s PIR, the corps’ collection assets and intelligence products are also available and simultaneously supporting the needs of higher and lower echelon commanders.

**Coverage Enhanced:**

The capabilities and technologies embedded in MI systems enhance the commander’s ability to see the width and depth of the battlefield at a higher, more consistent degree of resolution than ever. As a result, commanders have at their disposal more near-real time (NRT) and real-time information with targeting accuracy. This enables G2s (S2s) to quickly gather and synthesize information. They can then present the intelligence so that the commander and his staff can quickly assimilate it. Intelligence organizations at each echelon facilitate the synthesis of information through complementing collection, processing, and balanced all-source reporting. For more information on IEW systems, refer to FM 34-8 and FM 34-10-2.

**Skip Echelon Flexibility:**

The flexibility of the Intelligence BOS supports skip echelon “push” of critical perishable intelligence from national, joint, and theater organizations to the tactical commander. At the same time, a tactical unit is capable of conducting skip echelon “pull” of information from theater, joint, and national data bases to answer the commander’s intelligence requirements. The extent of skip echelon support is determined by the commanders and the intelligence organizations at each echelon. It is the responsibility of organizations conducting skip echelon activities to provide intermediate echelons with the

same information. The utility of skip echelon intelligence support is most evident when preparing for and during force projection operations.

**Organizations Redesigned:**

MI organizations are, or will be redesigned to take advantage of technology and incorporate lessons learned in order to better serve the needs of commanders. From theater MI brigade to direct support MI company, commanders are provided with a balanced, scalable, and flexible force which can be tailored to meet any contingency. In cases such as the ACE, assets have been consolidated to permit more effective control and efficient use of limited resources. Organizations like the CMISE, ACE, and DISE were developed to facilitate the “pull” of intelligence for all commanders. Underpinning these structural changes is the manning of MI organizations from battalion to national level with soldiers trained to deal effectively with new technology and concepts.

**Disciplined Operations:**

The following laws, regulations, and policies ensure disciplined operations support commanders:

- AR 381-10 ensures that intelligence activities will not violate the right to privacy of US citizens.
- United States Signal Intelligence Directives (USSIDs) are the policies and procedures that provide the authority for production and dissemination of SIGINT. USSIDs establish uniform techniques, standards, and support mechanisms for collecting, processing, and reporting SIGINT-derived information.
- Status of Forces Agreements (SOFAs), Rules of Engagement (ROE), international laws, and other documents ensure that intelligence activities do not exacerbate the political situation which the intelligence operation supports.
- Doctrinal principles and TTPs ensure that intelligence activities maximize support to the commander and eliminate nonessential operations.

**LIMITATIONS OF THE INTELLIGENCE BOS**

The Intelligence BOS is a seamless, unified system that anticipates and satisfies intelligence needs. Commanders ensure its proper employment by clearly articulating intent, decisively designating PIR, and boldly prioritizing the types of targets they want engaged to the entire Intelligence BOS. Commanders must, however, understand the limitations of the Intelligence BOS and not place unrealistic expectations on the system. Major limitations are discussed on the next page.

- Intelligence reduces uncertainty on the battlefield, but it cannot eliminate it entirely. The commander will always have to accept some risk.
- The Intelligence BOS is comprised of finite resources and capabilities. The density of MI soldiers and IEW systems within a unit is limited. Once lost to action or accident, these soldiers and systems cannot easily be replaced. The loss of qualified language-trained soldiers, and in particular soldiers trained in low-density languages, could adversely affect the ability of a MI unit to accomplish its mission. In addition, IEW systems operate within limited technical parameters and are designed to exploit a specific threat system or type of system.
- The Intelligence BOS cannot effectively and efficiently provide IEW support without adequate communications equipment, capacity, and connectivity. Commanders and G2s (S2s) must ensure communications support to intelligence is given appropriate priority during planning and execution of operations.
- Commanders and G2s (S2s) cannot expect everything needed will be automatically “pushed” to them from higher levels. The “push” of products from higher echelons does not relieve subordinate staffs from conducting detailed analysis and focusing the efforts of higher headquarters (HQ). Nor can they expect products “pushed” to them will always be at the level of detail they require. Commanders and G2s (S2s) must focus higher echelons by clearly articulating and actively pursuing intelligence requirements.

## TRAINING THE INTELLIGENCE BOS

*On the day of battle, soldiers and units will fight  
as well or as poorly as they are trained.*

—FM 100-5, 14 June 1993

Training the Intelligence BOS means training commanders, MI leaders, MI soldiers, and organizations. Commanders must understand the capabilities of the Intelligence BOS and be trained to drive and integrate the system with their operations. MI leaders must understand the tactics of their supported command and learn to synchronize IEW operations with the commander’s concept of operation. MI soldiers must master the technical, tactical, and leadership skills required to employ and maintain sophisticated intelligence systems on the battlefield. Organizations and crew-served systems must be trained to function as a team and integrate their efforts within the Intelligence BOS and with other BOSs.

The responsibility for training the Intelligence BOS rests with commanders and intelligence leaders. Commanders are ultimately responsible for the overall training proficiency of their units; however, the G2 (S2) and other intelligence leaders share in that responsibility. The G2 (S2) must assist the commander in developing and integrating realistic intelligence activity into the training of

combat, combat support (CS), and combat service support (CSS) units. Realistic training fosters awareness of the capabilities and limitations of the Intelligence BOS in non-MI units while honing the skills of MI soldiers and organizations.

Intelligence training should be derived from the organization's Mission Essential Task List (METL), battle tasks, and operation plan (OPLAN) requirements. To the extent possible, intelligence training should be used to enhance and refine real-world intelligence operations of the organization. Force projection operations, in particular, require realistic and battle focused training of MI personnel and organizations to ensure intelligence readiness.

Training the Total Force in the Intelligence BOS requires embedding realistic intelligence activities into unit training and that conducted in the Combat Training Center programs. Whenever possible, commanders should expand the scope of training at these centers or homestations by linking field training exercises with computer simulations play at other locations. Combat information and intelligence should be incorporated into programs of system trainers and computerized battle simulations to provide realism to crew and staff training.

#### **Intelligence Training Principles:**

The following intelligence training principles assist the commander in training his unit:

**Execute Real-World Operations.** Real-world intelligence operations use all aspects of the Intelligence BOS from the commander developing his PIR to disseminating graphic intelligence products to subordinate commanders. Using the intelligence system in peacetime trains personnel to plan, collect, process, analyze, synthesize, report, and evaluate intelligence. It supports contingency planning and ensures the procedures and connectivity required for force projection operations are valid and available to the commander.

**Integrate Intelligence.** Integrate intelligence into training and exercises. Use the intelligence cycle and decision making process to train commanders and G2s (S2s) how to interact and develop plans that synchronize IEW support with the commander's operation. The G2 (S2) should always support this effort with appropriate intelligence products and integrate the Intelligence BOS with other battlefield systems.

**Understand the Battlefield.** Teach the G2 (S2) and MI unit personnel about friendly tactics and operations. Have the G2 (S2) staff participate in or observe training events of combat, CS, and CSS units. The performance of intelligence analysts and collectors at all levels is directly proportional to their understanding of battlefield dynamics.

**Apply Standards.** Apply standards to IEW training. Standards provide commanders a means of measuring intelligence readiness and equipping subordinates with clearly defined training objectives. TCS 34-10-20, 34-10-20-1, and 34-10-20-2 contain standards which commanders can use to develop METL, plan and execute training, and assess performance. By

applying these standards with established doctrine and TTP, commanders can ensure commonality of operations between their units and contribute to the effectiveness of the Intelligence BOS.

**Maintain Proficiency.** Establish consistent approaches to collective and individual training. Collective training should be conducted at a baseline proficiency level consistent with unit readiness standards. Individual training, particularly language training, should be creative and challenge soldiers to go beyond Army standards. The Readiness Training (REDTRAIN) program is one means of maintaining both individual and unit proficiency. Through live environment training, REDTRAIN allows units to employ their soldiers and equipment against potential wartime or OOTW targets. Other REDTRAIN opportunities allow soldiers to improve their military occupational specialty (MOS) skills and language proficiency through attendance at specialized technical and language courses.