FIELD MANUAL
No. 34-1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 27 September 1994

INTELLIGENCE AND ELECTRONIC WARFARE OPERATIONS

TABLE OF CONTENTS

Page

PREFACE iii

INTRODUCTION v

CHAPTER 1 – INTELLIGENCE AND ELECTRONIC WARFARE SUPPORT TO MILITARY OPERATIONS 1-1
  Mission of Army Intelligence 1-1
  IEW in the Force Projection Army 1-1
  Principles of Force Projection IEW 1-4
  Intelligence Battlefield Operating System 1-11
  Primary Features of the Intelligence BOS 1-11
  Limitations of the Intelligence BOS 1-13
  Training the Intelligence BOS 1-14

CHAPTER 2 – FUNDAMENTALS OF IEW OPERATIONS 2-1
  Total Force Effort 2-1
  Levels of Intelligence 2-2
  Intelligence Disciplines and Functions 2-4
  Characteristics of Effective Intelligence 2-7
  Primary Intelligence Tasks 2-7
  The Intelligence Cycle 2-15
  Commander's Intelligence Requirements 2-17
  Electronic Warfare 2-20
  Electronic Warfare Components 2-20

CHAPTER 3 – FORCE PROJECTION OPERATIONS 3-1
  Peacetime IEW Operations 3-1
  IEW and the Stages of Force Projection 3-2

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

*This publication supersedes FM 34-1, 2 July 1987.

Page

CHAPTER 4 – COMBAT OPERATIONS 4-1
IEW Supports Commanders 4-1
Commander's Intelligence Team 4-2
Range of Military Operations 4-3
IEW and the Tenets of Army Operations 4-4
Battlefield Framework 4-5
Offensive Operations 4-6
Defensive Operations 4-8
Retrograde Operations 4-10
Military Intelligence Units 4-11
Processing and Disseminating Intelligence 4-15
Electronic Warfare Planning 4-16
IEW Support in Special Environments 4-17

CHAPTER 5 – JOINT, COMBINED, AND INTERAGENCY OPERATIONS 5-1
Joint Operations 5-1
Combined Operations 5-10
Interagency Operations 5-12

CHAPTER 6 – OPERATIONS OTHER THAN WAR AND SPECIAL OPERATIONS 6-1
Operations Other Than War 6-1
Special Operations 6-8

CHAPTER 7 – INFORMATION OPERATIONS 7-1
Information Age and IEW 7-1
Information Warfare 7-2
Information Operations. 7-3
Command and Control Warfare 7-5

GLOSSARY Glossary-1
Section I. Abbreviations and Acronyms Glossary-1
Section II. Terms Glossary-4

REFERENCES References-1

INDEX Index-1

PREFACE

Field Manual 34-1 is the Army's capstone manual for military intelligence (MI) doctrine. It is consistent with and expands doctrine contained in FM 100-5, the Army's operations doctrine. It describes the Intelligence Battlefield Operating System (BOS) and electronic warfare (EW) and how they support operations. It provides the guidance needed by MI personnel to support the commander with intelligence and electronic warfare (IEW) in warfighting and in operations other than war (OOTW).

When thinking about IEW support in the context of this manual, one should remember that America's Army and its Intelligence Corps is a doctrinally based institution. Doctrine is neither unchanging dogma nor the exclusive purview of an intellectual elite. Neither is it merely rigid adherence to a set of tactics, techniques, and procedures (TTP) that tell us "how to fight." Doctrine provides a common, flexible framework of thought and expectations within which soldiers think about and debate the issues of our profession. Doctrine provides a basis for the institution to incorporate new ideas, technologies, and organizational design to help leaders become the adaptive, creative problem solvers that modern military operations require. Direct combat, humanitarian relief, or disaster recovery—all have in common, methods for organizing and carrying out assigned IEW missions. To change our doctrine is, therefore, to change the way in which we think and debate the intellectual and physical means for ensuring our continuity of purpose.

Joint and Army doctrine are the driving forces that determine how we organize, train, and equip our forces. When we rethink our doctrine, we directly influence our training, leader development, force design, and equipment acquisition programs. Doctrine bridges intellectual, physical, and technological change. It synthesizes and harmonizes our ideas about future wars and links the institution to individual soldiers and leaders, helping them to understand the nature and reasons for the changes that are taking place around them. The Army invests heavily to ensure that the different arms, services, skills, and specialties understand the environment in which their efforts make the difference between success and failure in battle. Doctrine is the medium through which this sense of belonging is conveyed and enforced.

Our doctrine and professional ethics help us contain and control the simultaneous and contradictory requirements for continuity of purpose, growth, and change. When the world changes, doctrine must change; yet, it must not depart radically from principles of combat that have stood the test of time from ancient history to the present. We designed our intelligence doctrine and this manual with this in mind.

This manual serves as a basis for IEW doctrine, training, and combat developments, and is the foundation for Army service school IEW instruction. It addresses the Intelligence BOS and MI unit functions in a force projection army, across the full scope of military operations through all phases of crisis response. It describes the seamless nature of the Intelligence BOS, its structure, and how its organizations operate. It also describes the Army MI role in combined, joint, and interagency operations. Field manuals containing specific TTPs are referred to throughout the manual.

This manual is designed for use by commanders and their staffs; all MI commanders, their staffs, and trainers; and MI personnel at all echelons. It applies equally to the Active Army, United States Army Reserve (USAR), and Army National Guard (ARNG). It is also intended for commanders and staffs of joint and combined commands, United States (US) Naval and Marine Forces, units of the US Air Force, and the military forces of allied countries.

The proponent of this publication is the United States Army Intelligence Center and Fort Huachuca. Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, US Army Intelligence Center and Fort Huachuca, AlTN: ATZS-TDL-D, Fort Huachuca, AZ 85613-6000.

This publication implements the following international agreements: STANAG 2936, Intelligence Doctrine, Edition 1.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

INTRODUCTION

The commander drives the intelligence effort.
—FM 100-5, 14 June 1993

Over the last 20 years, the MI Corps has matured rapidly and become integral to combat organizations. We did this by eliminating the "stovepipes" in counterintelligence (CI) and signals intelligence (SIGINT), and breaking down the so-called "green door" to intelligence. We created multidiscipline MI battalions at division, and brigades at corps and theater. We oriented our training on tactical and operational level IEW support to commanders. In so doing, we created leaders and soldiers who understand tactics and who are technically proficient in focusing downwardly the BOS we call Intelligence on commanders who lead soldiers in combat. The fruits of our efforts were demonstrated in the MI Corps' successful performance during Operations Desert Shield and Desert Storm.

After Operation Desert Storm, the Chief of Staff, US Army, took steps to review Army operations. He did this to assess lessons learned from the Gulf War and to review Army doctrine, training, and organization in the new geopolitical setting of the post-Cold War era. In a few short months, we moved from a national strategy of deterrence to one of force projection. As part of this overall Army effort to adapt to the force projection mission articulated in FM 100-5, MI also underwent a significant introspection. MI conducted a detailed assessment, called MI Relook, to review how MI operated in the Gulf War, and how MI must support commanders in scenarios that range from peacekeeping to large-scale conflict. These findings became the basis for major changes in MI, and in 1993, the Army Chief of Staff approved MI's Force Design Update. The approved doctrinal changes from these findings are contained in this, the capstone manual for MI, FM 34-1.

MI continues building a balanced force driven by sound doctrine and training which focuses intelligence downwardly on the commander, to deliver intelligence on time, every time. MI battalions at division are changing to balance capabilities with human intelligence (HUMINT), imagery intelligence (IMINT), multidiscipline counterintelligence (MDCI), and SIGINT. The United States Army Intelligence and Security Command (INSCOM) MI brigades are also changing structure and orienting their support downwardly.

The Corps MI Support Element (CMISE) in each corps from INSCOM's theater MI brigades is emplaced to help gain priority for, and to focus theater and national intelligence on, the corps. We continue fielding and improving intelligence fusion and dissemination systems, like the All-Source Analysis System (ASAS) and TROJAN Special Purpose Intelligence Remote Integrated Terminal (SPIRIT), into divisions, corps, and theaters.

The MI Corps has given considerable thought to IEW support to force projection operations. Training and doctrine have prepared the Army to fight and win "Day One" of any battle. But, in force projection operations, getting to the battlefield and winning decisively while protecting American lives requires that the intelligence effort begin long before that first day. This requires that force readiness take on a new meaning. If our divisions, corps, and theater forces stand ready to project force anywhere in several potential contingencies, then their intelligence support should also be at the same or higher level of readiness. Consequently, commanders must have routine, direct, continuous and active links into the intelligence system to provide and, perhaps more important, to focus intelligence on their tactical and operational needs early. 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. We cannot assume that the intelligence data bases and access will be there upon alert unless commanders drive their intelligence effort daily.

Readiness requires MI to execute the principle of "train as you fight." MI leaders and soldiers must master the tactical and technical skills which will enable them to fully exploit the potential of the Intelligence BOS. They must be trained to understand the dynamics of combined arms operations and how to synchronize the intelligence effort with the commander's concepts. Training must be focused on providing commanders with an intelligence force capable of supporting force projection operations. And, every opportunity must be taken to integrate realistic mission-oriented intelligence scenarios, processing, and communications into joint and combined arms training events.

Force projection means MI must be more flexible and capable of deploying small teams with links to a remote base that is dedicated to pushing intelligence, specifically designed for the tactical commander, forward. MI must be capable of tailoring the MI entry and follow-on forces to meet the commander's needs. MI will go in light for deployment and protection reasons then build to a force capable of sustained IEW operations. Also, in force projection, tactical intelligence comes from the top down during significant stages of the operation until organic tactical intelligence elements are engaged. Because of this, MI must be prepared to execute a crossover or transition from operational intelligence support from higher echelons to tactical intelligence support from in-theater IEW assets.

There will also be a premium on HUMINT, MDCI, and SIGINT resources during force projection operations. IMINT capabilities like the unmanned aerial vehicle (UAV), Joint Surveillance Target Attack Radar System (Joint STARS), and Tactical Exploitation of National Capabilities (TENCAP) downlinks will also be limited. That means brigades, divisions, and corps must pull intelligence in from above their levels and focus it on specific priorities. Moreover, this requirement calls for solid links to, and integration with, national and joint intelligence assets. INSCOM is a major player in that endeavor to bridge the gaps between echelons and create a seamless intelligence architecture from tactical forces to national level organizations.

By its very nature, force projection is a joint effort. This is particularly true in IEW operations. Air Force and Navy intelligence assets are often the force commander's principal source of operational intelligence. On the ground, Army and Marine Corps IEW units are relied upon for collection of tactical intelligence. Each service depends upon the other's intelligence resources and products to develop a comprehensive, accurate picture of the battlefield. To varying degrees, this same situation also applies to combined operations where US Forces may rely upon the intelligence and communication services of other nations. To this end, we must strive for intelligence organizations and systems which are compatible and interoperable in a joint or combined environment. The benefit of this effort is a seamless intelligence system, which allows the push-pull of intelligence between echelons and services, and is capable of supporting commanders from pre-crisis to redeployment throughout the range of military operations.

These and other aspects of force projection operations have changed the way we must think and direct intelligence. They point out the pivotal importance of the commander's role in intelligence, not just when the crisis begins, but well before and throughout the operation. Force projection requires flexibility, intelligence, agility, and focus. We must review the entire way we synchronize collection operations and all-source analysis with the commander's operation. We must reorient training so commanders and G2s (S2s) alike learn the range of IEW capabilities and how to bring them to bear on tactical priorities. Furthermore, a focus downwardly requires those at levels above corps to understand the tactical ground commander's IEW needs. They have to visualize the commander's perspective and tailor the products for his decisions.

The end of the Cold War and the rapid changes in the world's geopolitical environment provide a challenging setting for military operations. A setting in which commanders must redefine force readiness and the priority they place on intelligence. We no longer face the single "threat" of the Soviet Union but many potential missions—missions which require an active command role in focusing IEW assets on priority requirements daily. Success in war and OOTW could depend on how well "the commander drives the intelligence effort."

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.

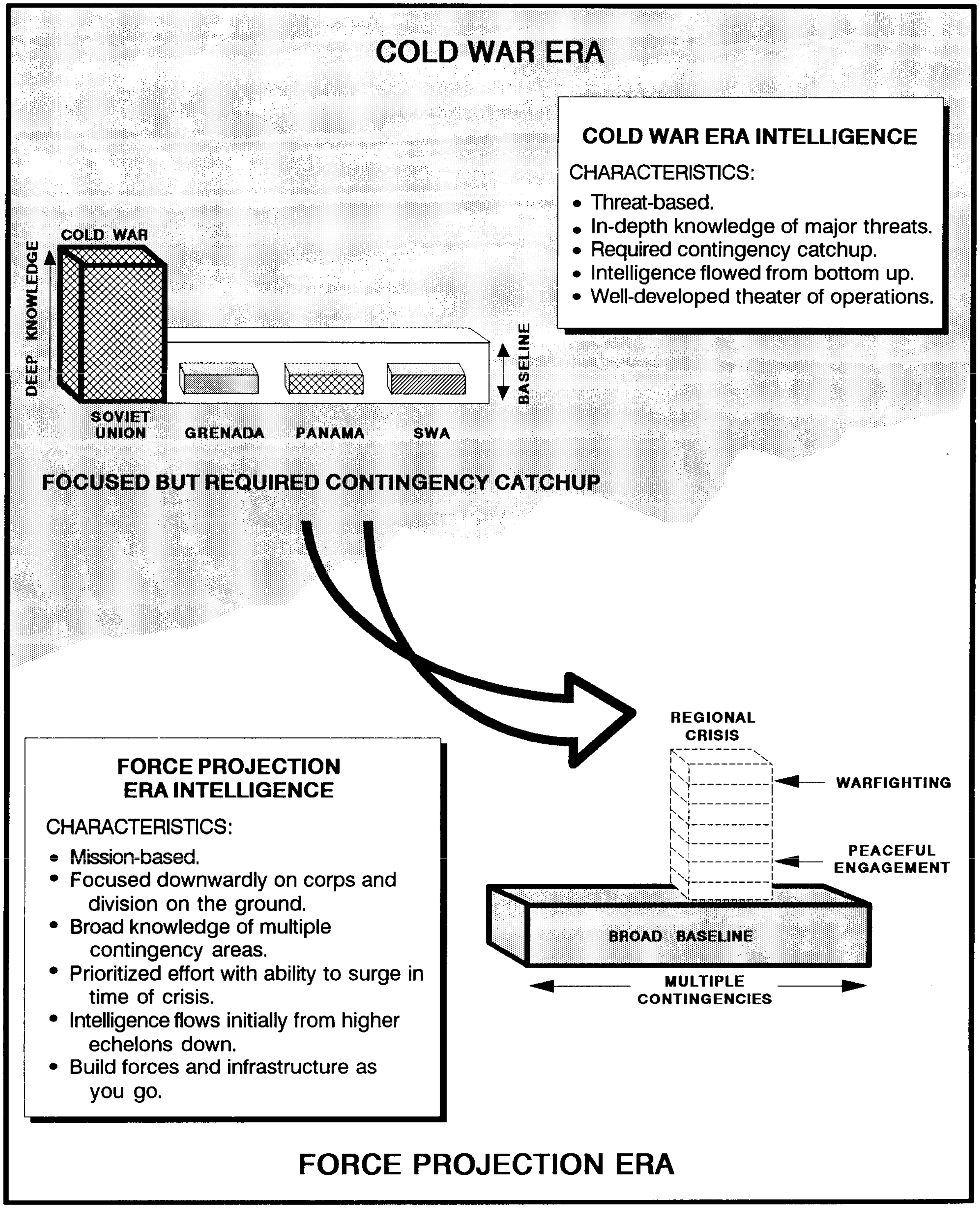
IEW IN THE FORCE PROJECTION ARMY

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 00TW. 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 lEW 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 Ml 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, Ml 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.


COLD WAR ERA
COLD WAR
DEEP KNOWLEDGE
BASELINE
SOVIET UNION
GRENADA
PANAMA
SWA
FOCUSED BUT REQUIRED CONTINGENCY CATCHUP
REGIONAL CRISIS
WARFIGHTING
PEACEFUL ENGAGEMENT
BROAD BASELINE
MULTIPLE CONTINGENCIES
FORCE PROJECTION ERA

COLD WAR ERA INTELLIGENCE

CHARACTERISTICS:

- Threat-based.
- In-depth knowledge of major threats.
- Required contingency catchup.
- Intelligence flowed from bottom up.
- Well-developed theater of operations.

FORCE PROJECTION ERA INTELLIGENCE

CHARACTERISTICS:

- Mission-based.
- Focused downwardly on corps and division on the ground.
- Broad knowledge of multiple contingency areas.
- Prioritized effort with ability to surge in time of crisis.
- Intelligence flows initially from higher echelons down.
- Build forces and infrastructure as you go.

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

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.

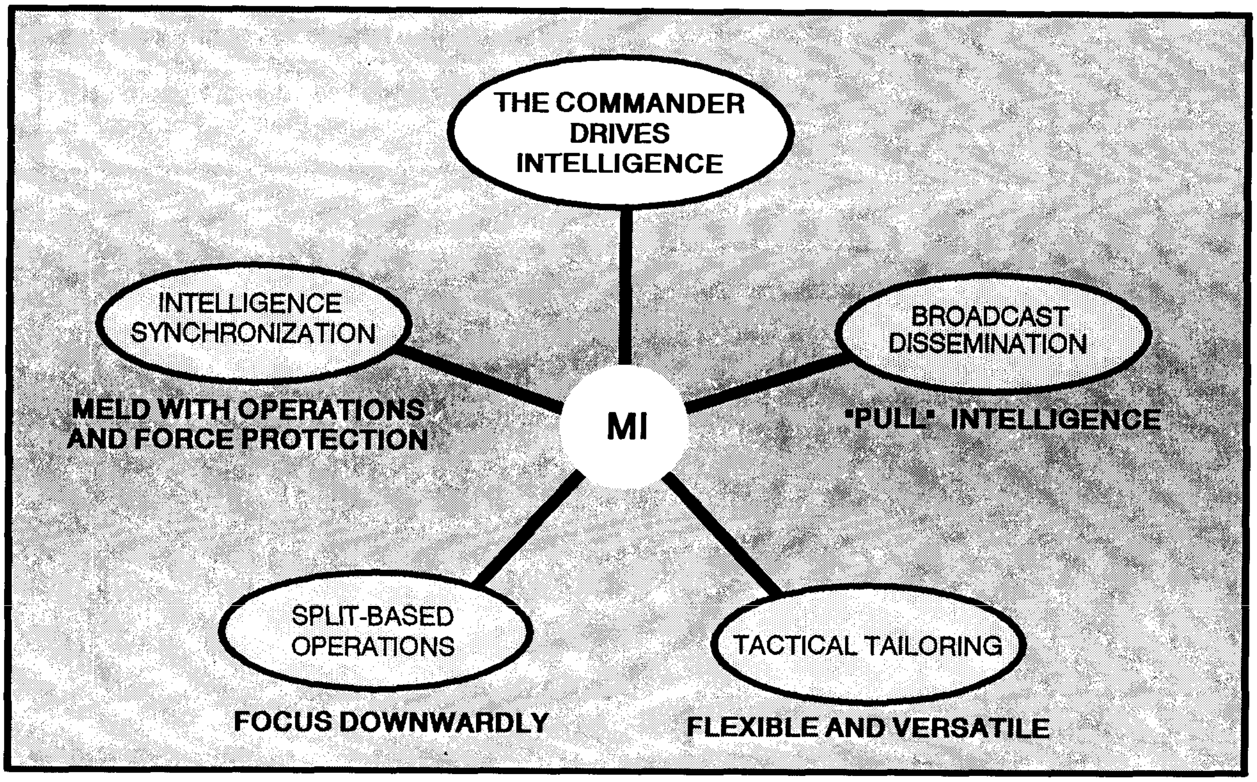

THE COMMANDER DRIVES INTELLIGENCE
INTELLIGENCE SYNCHRONIZATION
MELD WITH OPERATIONS AND FORCE PROTECTION
MI
BROADCAST DISSEMINATION
"PULL" INTELLIGENCE
SPLIT-BASED OPERATIONS
FOCUS DOWNWARDLY
TACTICAL TAILORING
FLEXIBLE AND VERSATILE

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.

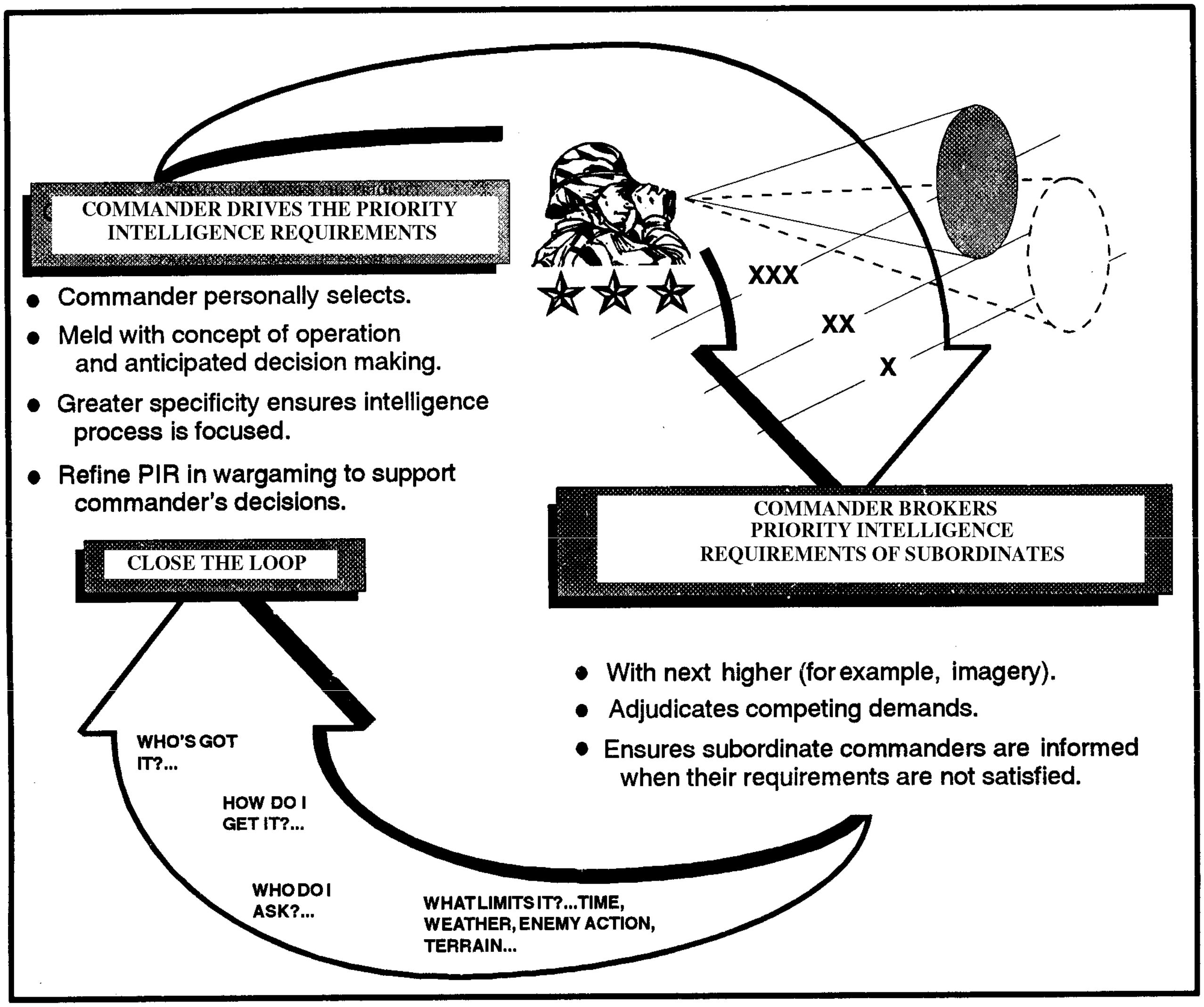

COMMANDER DRIVES THE PRIORITY INTELLIGENCE REQUIREMENTS
● Commander personally selects.
● Meld with concept of operation and anticipated decision making.
● Greater specificity ensures intelligence process is focused.
● Refine PIR in wargaming to support commander's decisions.
XXX
XX
X
COMMANDER BROKERS PRIORITY INTELLIGENCE REQUIREMENTS OF SUBORDINATES
● With next higher (for example, imagery).
● Adjudicates competing demands.
● Ensures subordinate commanders are informed when their requirements are not satisfied.
CLOSE THE LOOP
WHO'S GOT IT?...
HOW DO I GET IT?...
WHO DO I ASK?...
WHAT LIMITS IT?...TIME, WEATHER, ENEMY ACTION, TERRAIN...

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.

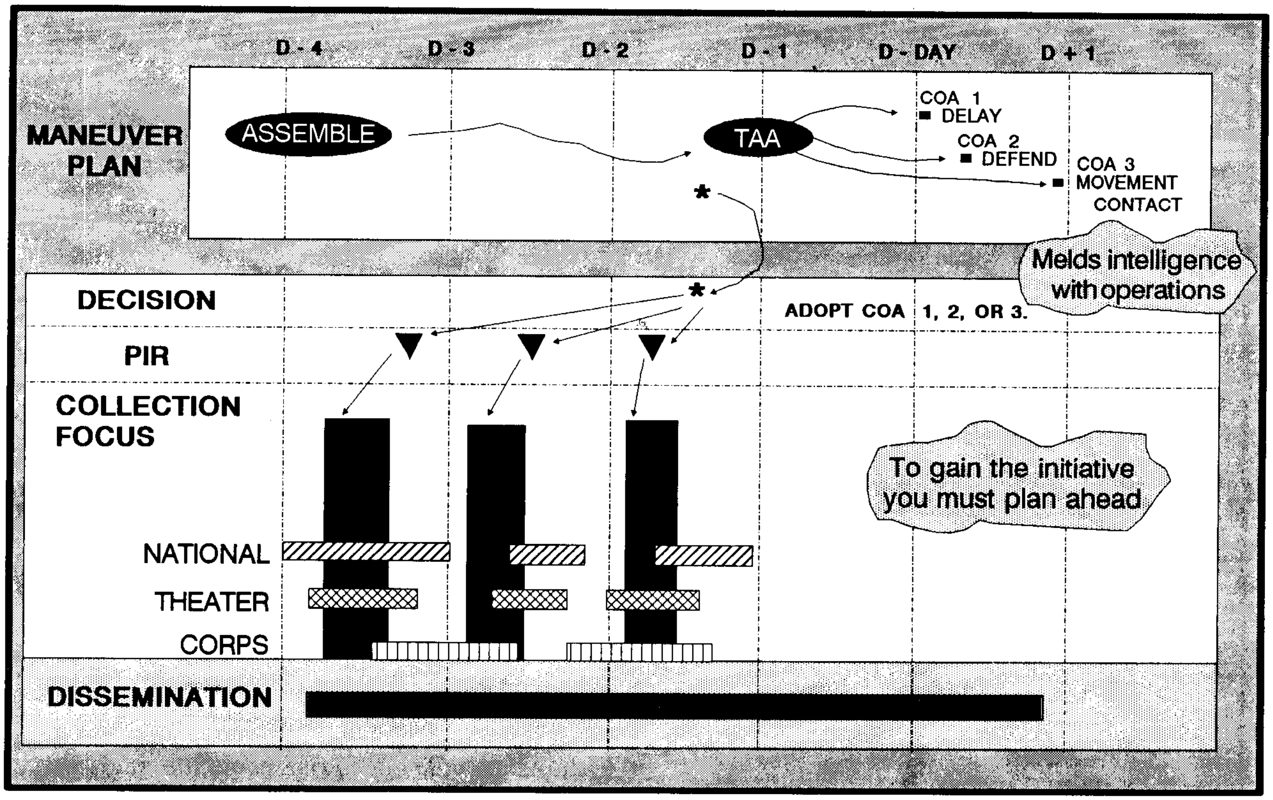

D - 4
D - 3
D - 2
D - 1
D - DAY
D + 1
MANEUVER PLAN
ASSEMBLE
TAA
COA 1
■ DELAY
COA 2
■ DEFEND
COA 3
■ MOVEMENT CONTACT
*
Melds intelligence with operations
DECISION
*
ADOPT COA 1, 2, OR 3.
PIR
COLLECTION FOCUS
To gain the initiative you must plan ahead
NATIONAL
THEATER
CORPS
DISSEMINATION

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.

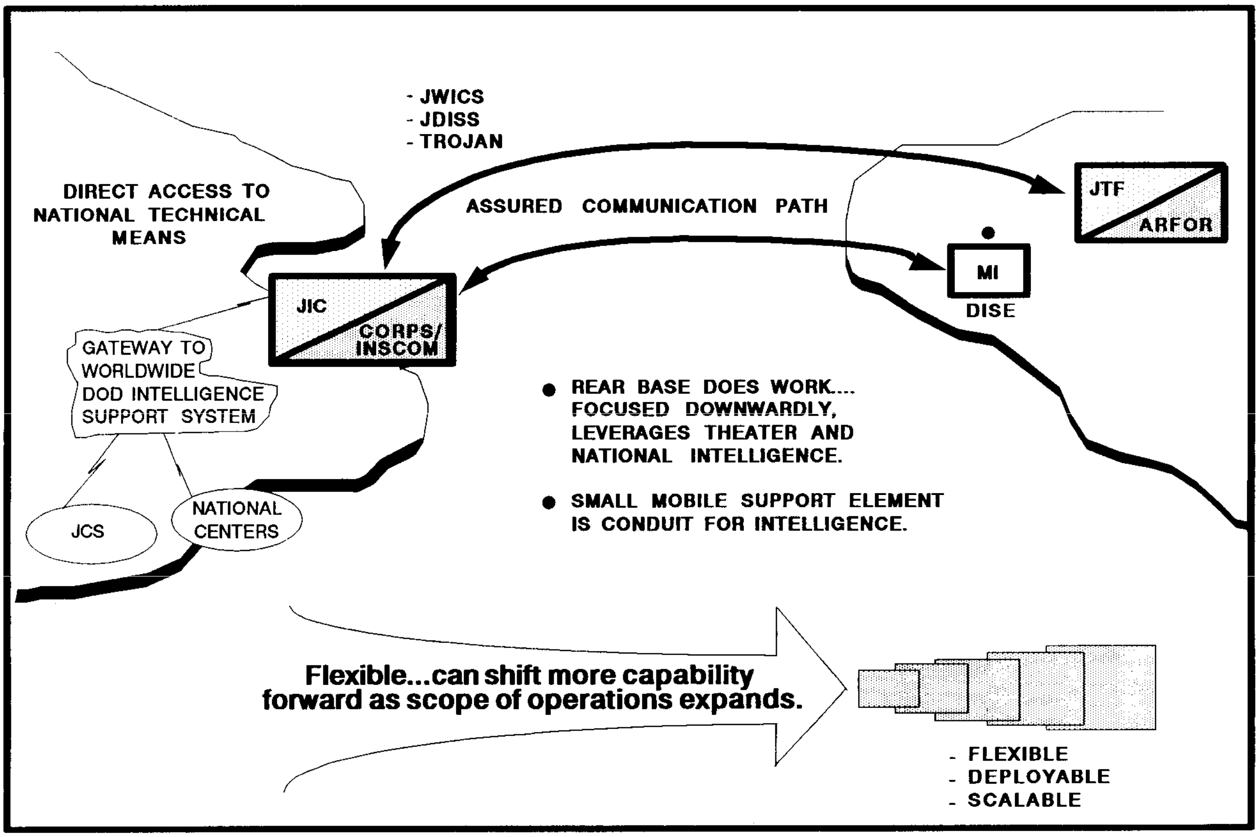

- JWICS
- JDISS
- TROJAN
DIRECT ACCESS TO NATIONAL TECHNICAL MEANS
ASSURED COMMUNICATION PATH
JTF
ARFOR
MI
DISE
JIC
CORPS/ INSCOM
GATEWAY TO WORLDWIDE DOD INTELLIGENCE SUPPORT SYSTEM
JCS
NATIONAL CENTERS
● REAR BASE DOES WORK.... FOCUSED DOWNWARDLY, LEVERAGES THEATER AND NATIONAL INTELLIGENCE.
● SMALL MOBILE SUPPORT ELEMENT IS CONDUIT FOR INTELLIGENCE.
Flexible...can shift more capability forward as scope of operations expands.
- FLEXIBLE
- DEPLOYABLE
- SCALABLE

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 taloring considerations.

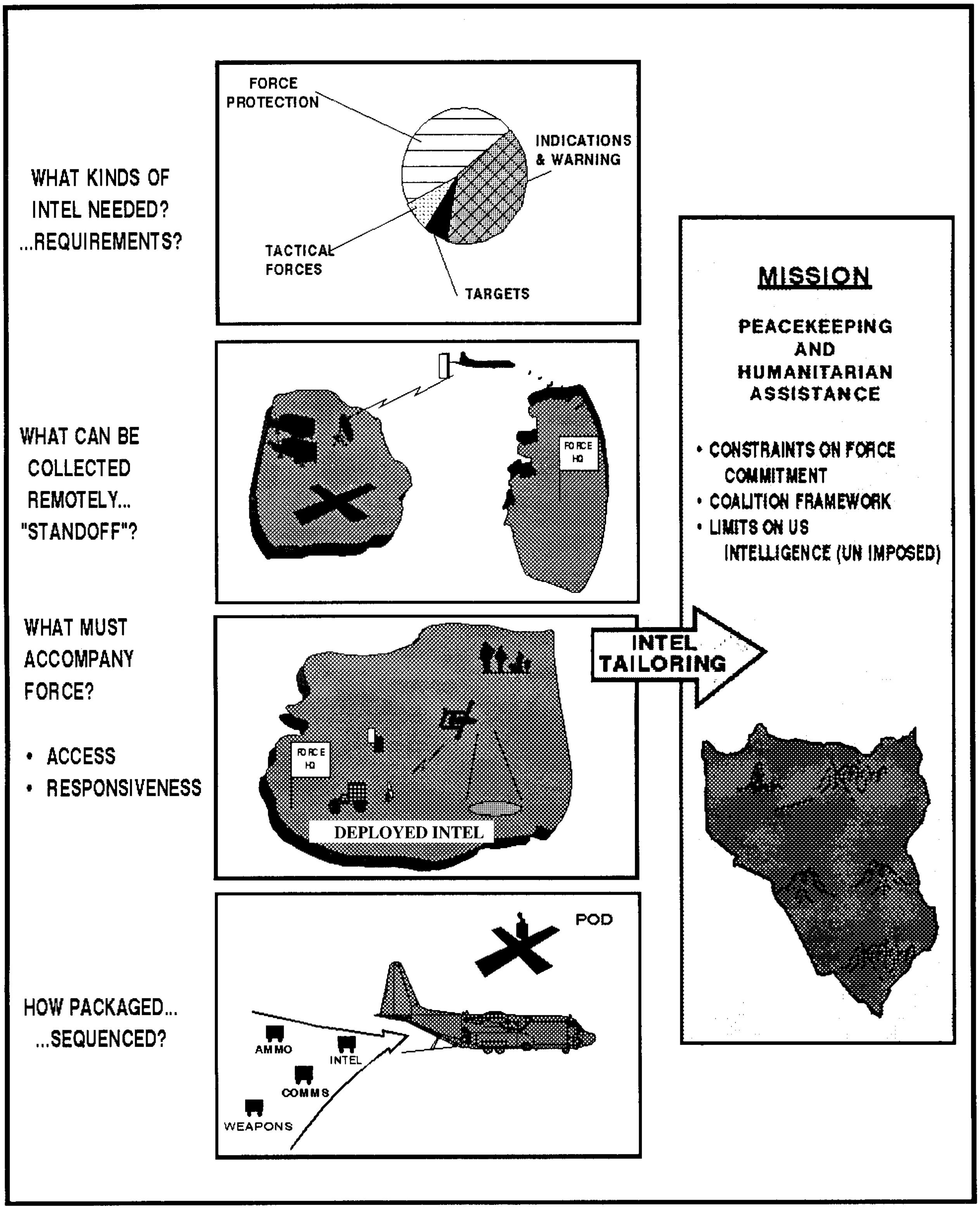

WHAT KINDS OF
INTEL NEEDED?
...REQUIREMENTS?
FORCE
PROTECTION
INDICATIONS
& WARNING
TACTICAL
FORCES
TARGETS
WHAT CAN BE
COLLECTED
REMOTELY...
"STANDOFF"?
FORCE
HQ
WHAT MUST
ACCOMPANY
FORCE?
• ACCESS
• RESPONSIVENESS
FORCE
HQ
DEPLOYED INTEL
INTEL
TAILORING
HOW PACKAGED...
...SEQUENCED?
POD
AMMO
INTEL
COMMS
WEAPONS
MISSION
PEACEKEEPING
AND
HUMANITARIAN
ASSISTANCE
• CONSTRAINTS ON FORCE
COMMITMENT
• COALITION FRAMEWORK
• LIMITS ON US
INTELLIGENCE (UN IMPOSED)

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.

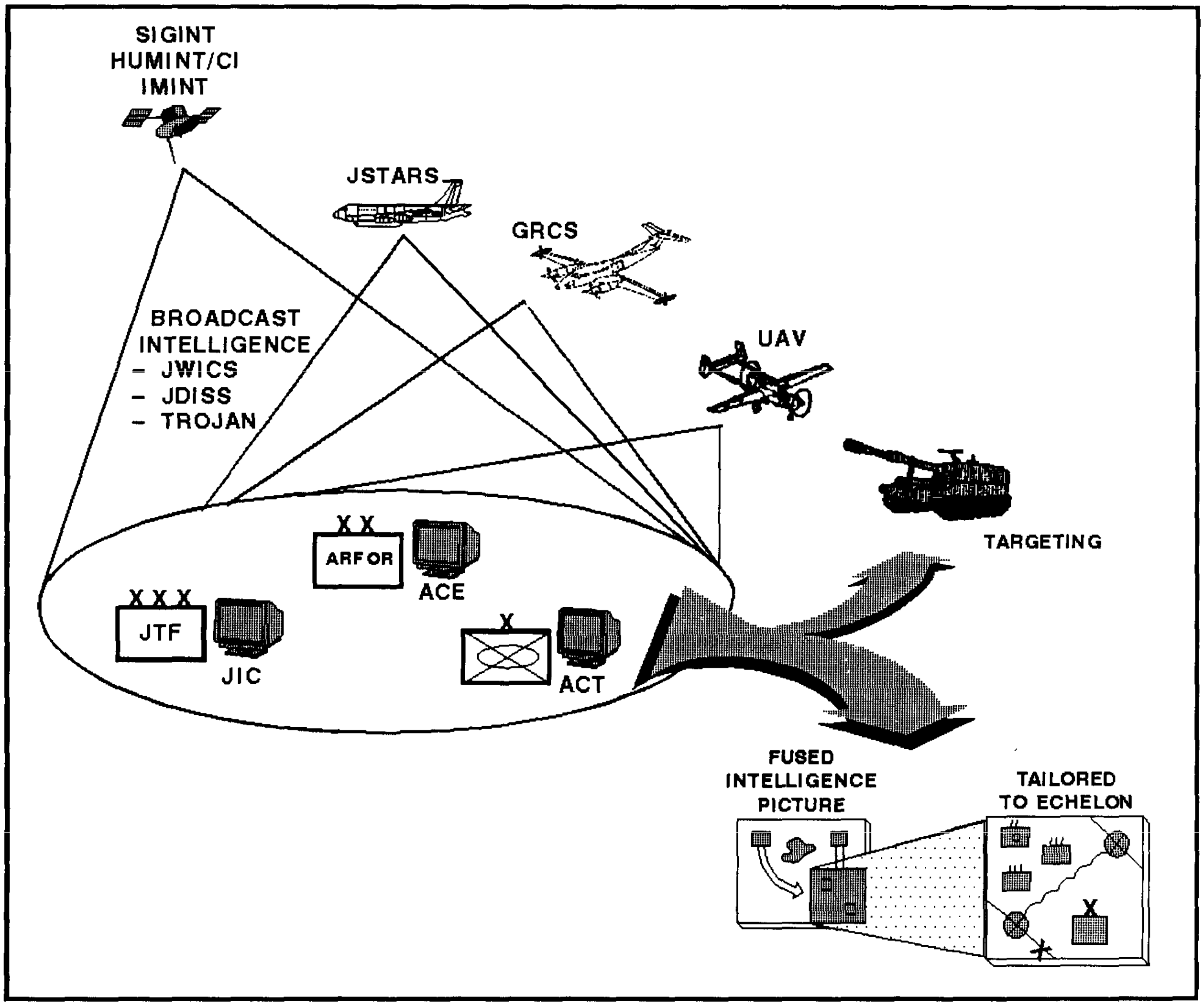

SIGINT
HUMINT/CI
IMINT
JSTARS
GRCS
UAV
BROADCAST
INTELLIGENCE
- JWICS
- JDISS
- TROJAN
TARGETING
XX
ARFOR
ACE
XXX
JTF
JIC
X
ACT
FUSED
INTELLIGENCE
PICTURE
TAILORED
TO ECHELON

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. he 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. Ml 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. Intergrate intelligence into trainingand exercizes. 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.

CHAPTER 2

FUNDAMENTALS OF IEW OPERATIONS

> *One of the surest* ways *of forming good combinations in war should be to order movements only after obtaining perfect information of the enemy's proceedings. In fact, how can any man say what he should do himself, if he is ignorant of what his adversary is about?*
>
> —Jomini, 1838

Throughout history, military leaders have recognized the importance of intelligence. IEW operations are the commander's keys to victory in war and success in OOTW. Commanders use IEW to focus the combat power at their disposal to win decisively. Commanders also use IEW to protect and conserve combat power and resources during operations.

The Intelligence BOS described in Chapter 1 is a powerful tool. However, the commander, G2 (S2), MI unit commanders, and other leaders must work hard to exploit the full capabilities of the Intelligence BOS. IEW operations describe the execution of tasks related to the functions of intelligence and EW. This chapter describes the fundamentals of IEW operations.

TOTAL FORCE EFFORT

IEW operations are a total force effort. IEW supports all soldiers from the commander to the individual soldier in combat, CS, and CSS units. All soldiers must appreciate the importance of intelligence and the role IEW plays in—

- Applying and sustaining combat power.
- Contributing to the effectiveness of combined arms operations.
- Understanding the battlefield framework.
- Facilitating quick and accurate decision making during combat operations.
- Seeing, targeting, and simultaneously attacking the enemy throughout the depth of the battlefield.
- Conserving fighting potential of the force.
- Supporting other combat functions (maneuver, fire support, air defense, mobility and survivability, logistics, and battle command).

MI soldiers and organizations specialize in conducting IEW operations in support of the mission and in concert with the commander's intent. While MI units provide dedicated IEW support, all units, by virtue of their mission and AOS, have implied information collecting and reporting tasks. The G2 (S2) must know the intelligence collection and production capabilities of all units in the combat force and at higher echelons to optimize the use of intelligence assets at their disposal.

LEVELS OF INTELLIGENCE

The levels of intelligence correspond to the established levels of war: **strategic, operational,** and **tactical.** Like the levels of war, the levels of intelligence serve as a framework in which commanders and MI personnel visualize the logical flow of operations, allocation of resources, and assignment of tasks. The levels of intelligence are not tied to specific echelons but rather to the intended outcome of the operations which they support. As illustrated in Figure 2-1, echelons and levels of intelligence vary, The relationship is based upon the political and military objectives of the operation and the commander's needs.

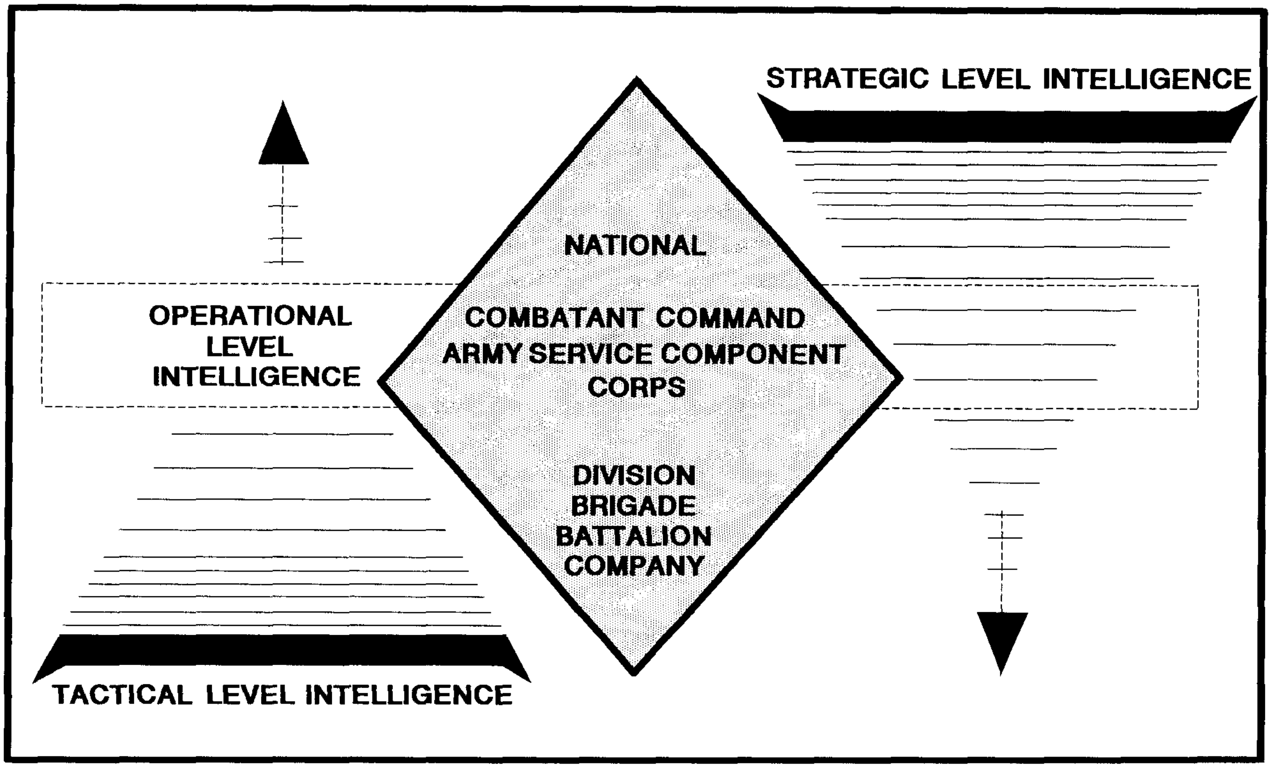

STRATEGIC LEVEL INTELLIGENCE
NATIONAL
OPERATIONAL LEVEL INTELLIGENCE
COMBATANT COMMAND
ARMY SERVICE COMPONENT
CORPS
DIVISION
BRIGADE
BATTALION
COMPANY
TACTICAL LEVEL INTELLIGENCE

Figure 2-1. Levels of intelligence.

The commander on the ground, regardless of echelon, is provided a mixture of support from each level of intelligence. Strategic intelligence provides information on the host nation's political climate; operational intelligence identifies key objectives for the campaign; and tactical intelligence shows where the enemy can be decisively engaged. Advances in technology and the requirements of the modern battlefield also make the demarcation between strategic, operational, and tactical intelligence resources indistinguishable. Collection assets which normally support strategic intelligence can and often are tasked to support operational and tactical intelligence requirements. This blending of levels and resources is a characteristic of intelligence in the post-Cold War era, a characteristic which the Intelligence BOS exploits.

Strategic Intelligence

Strategic intelligence supports the formation of strategy, policy, and military plans and operations at the national and theater levels. Strategic intelligence

- Concentrates on the national political, economic, and military considerations of states or nations. It identifies the support for governments, the ability of states or nations to mobilize for war, the national political objectives, and the personalities of national leaders.
- Identifies a nation's ability to support US Forces and operations (for example, ports and the transportation infrastructure).
- Predicts other nations' responses to US theater operations.

Operational Intelligence:

Operational intelligence supports the planning and execution of campaigns and major operations, and reflects the nature of the theater of war itself. Intelligence at this level serves as a bridge between strategic and tactical

- Supports friendly campaigns and operations by predicting the enemy's campaign plans, identifying their military centers of gravity, lines of communication (LOC), decisive points, pivots of maneuver, and other components necessary for campaign design.
- Focuses primarily on the intelligence needs of commanders from theater through corps and task force.

Tactical Intelligence:

Tactical intelligence supports the execution of battles and engagements. It provides the tactical commander with the intelligence he needs to employ combat elements against enemy forces and achieve the objectives of the operational commander. Tactical intelligence is distinguished from other levels by its perishability and ability to immediately influence the outcome of the tactical commander's mission. Tactical intelligence normally supports operations by echelons corps and below (ECB) units.

INTELLIGENCE DISCIPLINES AND FUNCTIONS

To clearly describe MI, the various intelligence areas are divided into four intelligence disciplines: **HUMINT, IMINT, measurement and signature intelligence (MASINT),** and **SIGINT;** and two multidiscipline intelligence functions: **CI** and **technical intelligence (TECHINT).** These disciplines and functions are performed by personnel who specialize in one of the areas of intelligence operations. To be effective and minimize threat deception, every intelligence operation must attempt to use all disciplines. The disciplines themselves must complement and cue each other for maximum effectiveness. Rarely will separate disciplines produce a comprehensive picture of the threat. Instead, each discipline will produce bits and pieces of information which analysts will synthesize to approach a total picture.

Human Intelligence:

HUMINT is the oldest of the intelligence disciplines. HUMINT is particularly important in force protection during OOTW. Although HUMINT can be a sole collection discipline, it is normally employed to confirm, refute, or augment intelligence derived through other disciplines. HUMINT is less restricted by weather or the cooperation of the enemy than technical means and does not require fire, maneuver, or communications to collect. HUMINT is restricted by access to targets and timeliness and, by its nature, can be risky to the safety of the collectors. HUMINT collection is well suited to the initial detection of emerging threats if placement and access are established early. The success of HUMINT in areas not previously targeted will be marginal in the early phases of a conflict or OOTW operation. Its effectiveness improves as HUMINT refocuses its efforts on the AO.

Interrogation and document exploitation are examples of HUMINT operations. HUMINT collection may also be conducted by long-range surveillance units (LRSUS), scouts, and patrols. Examples of other sources of HUMINT are pilot debriefings, refugees, and defectors. Furthermore, special operations forces (SOF) operating in hostile, denied, or politically sensitive areas, provide a unique HUMINT source. For more information on HUMINT, refer to FM 34-5(S) and FM 34-52.

Imagery Intelligence:

IMINT is the product of imagery analysis. Imagery is derived from, but is not limited to, radar, infrared, optical, and electro-optical sensors. IMINT and imagery systems increase the commander's ability to quickly and clearly understand his battle space and AI. IMINT is an important source of intelligence for intelligence preparation of the battlefield (IPB), targeting, terrain and environmental analysis, and battle damage assessment (BDA). IMINT is often the primary source of intelligence for the physical damage assessment portion of BDA. IMINT is subject to some limitations. Because most imagery requires ground processing and analysis, IMINT may be unable to respond to time-sensitive requirements. Imagery collection ma~ also be hampered by adverse weather and the vulnerability of the platform. As with other intelligence sources, IMINT is subject to threat attempts at deception. IMINT is most effective when used to cue other collection systems or to verify information provided by other sources. Systems that provide IMINT include the U2R Advanced Synthetic Aperture Radar System (ASARS), Joint STARS, UAV, and TENCAP systems.

For more information on IMINT, refer to FM 34-25-1, FM 34-25-2; and TC 34-55.

Measurement and Signature Intelligence:

MASINT uses information gathered by technical instruments such as radars, lasers, passive electro-optical sensors, radiation detectors, seismic, and other sensors to measure objects or events to identify them by their signatures. MASINT is critical for updating data on smart munitions. As future adversaries develop new technologies to evade some of the SIGINT and IMINT collection systems, MASINT will be used as another means of sensing the enemy. MASINT exploits other information that is not gained through SIGINT, IMINT, or HUMINT. The Remotely Monitored Battlefield Sensor System (REMBASS) is an example of a MASINT collector. For more information on REMBASS, refer to FM 34-10-1.

Signals Intelligence:

SIGINT results from collecting, locating, processing, analyzing, and reporting intercepted communications and noncommunications (for example, radars) emitters. SIGINT provides the commander with valuable, often NRT intelligence and targeting information on enemy intentions, readiness status, and dispositions by intercepting and locating enemy command, maneuver, fire support, reconnaissance, air defense, and logistics emitters. SIGINT operations require efficient collection management and synchronization to effectively overcome and exploit enemy efforts to protect his critical communications and weapons systems through emissions control, communications operating procedures, encryption, and deception. SIGINT is subdivided into: communications intelligence (COMINT); electronic intelligence (ELINT); and Foreign instrumentation signals intelligence (FISINT).

Examples of SIGINTground-based intercept and direction finding (DF) systems are the AN/PRD-12, the AN/TRQ-32A(V)2 (TEAMMATE), and the AIWRQ-I 52 (TRACKWOLF) systems. The GUARDRAIL Common Sensor (GRCS) is an example of an airborne intercept and DF system for both communications and noncommunications emitters. The AN/FSQ-144V (TROJAN) is the Army’s remote collection system supporting in-garrison collection by tactical MI units.

Counterintelligence:

The essence of the Army’s CI mission is to support force protection. By its nature, CI is a multidiscipline (counter-HUMINT, counter-IMINT, and counter-SIGINT) function designed to defeat or degrade threat intelligence and targeting capabilities. MDCI is an integral and equal part of IEW. MDCI operations support force protection through support to operations security (OPSEC), deception, and rear area operations across the range of military operations.

Examples of MDCI support to OPSEC range from evaluating components of a unique signature for a particular unit’s tactical command post (CP) to strategic level MDCI support to special access programs.

MDCI personnel advise deception planners on the vulnerabilities of threat foreign intelligence services (FISs) and associated battlefield collection systems to various friendly deception capabilities and techniques. This input is important because a deception plan cannot succeed if the enemy has no means to collect the details of the deception story. The MDCI estimate provides significant input to the deception estimate.

MDCI personnel support rear area operations through collection, analysis, and reporting of threats to the rear area. They work with military police, Civil Affairs (CA), and psychological operations (PSYOP) elements to provide intelligence support to rear area security. They assist combat, CS, and CSS staffs in developing the MDCI estimate of the rear area threat for integration into OPLANs and operation orders (OPORDs). Under the direction of the G2 (S2), MDCI personnel support the Rear Area Operations Center (RAOC) commander by assessing rear base vulnerabilities and recommending countermeasures. MDCI personnel also provide the RAOC commander with indications and warnings (I&W) on rear area threats and assist with the countermeasures to such threats. For more information on MDCI functions and activities, refer to FM 34-5(S) and FM 34-60.

Technical Intelligence:

TECHINT is a multidiscipline function which supports commanders by either identifying or countering an enemy’s momentary technological advantage, or by maintaining a friendly technological advantage. TECHINT is obtained by collecting, analyzing, and processing information in foreign technological developments. It also results from studying the performance of foreign material and its operational capabilities. The two parts of TECHINT, battlefield TECHINT and scientific and technical intelligence (S&TI) support commanders at all levels.

- Battlefield TECHINT provides operational and tactical commanders with immediate and usable intelligence on the capabilities and limitations of captured threat equipment. Battlefield TECHINT also results in the identification and evacuation of critical items of threat materiel requiring detailed S&TI analysis.

- S&TI provides detailed analysis on the technical characteristics of foreign systems and materiel. This results in the development of battlefield countermeasures to threat systems. S&TI also provides information on foreign developments in applied research which support Army Force Modernization.

Battlefield TECHINT frequently starts with one conscientious soldier who finds something new on the battlefield and takes proper steps to report it. The information or item is exploited at succeeding higher levels until a countermeasure is produced to neutralize the technological advantage or exploit a vulnerability. While a single weapon or technology seldom means the difference between final victory or defeat, it can give one side a battlefield advantage.

There is a mutually dependent relationship that exists between the support the commander gets from the TECHINT system and the support the TECHINT system gets from the commander. Operational and tactical commanders provide the raw material analysts need to identify, capture, protect, and evacuate enemy equipment, documents, and other items. Commanders further ensure the success of the process by demanding TECHINT support for the tactical effort to defeat the enemy. The analysts then take the raw material and produce the countermeasures commanders need to overcome an enemy's technological advantage. For more information on TECHINT, refer to FM 34-54.

CHARACTERISTICS OF EFFECTIVE INTELLIGENCE

The effectiveness of intelligence is measured against the following standards:

Timely:

Intelligence must be provided early enough to support planning, influence decisions and execution of operations, and prevent surprise from enemy action. it must flow continuously to the commander before, during and after an operation. Regardless of distance and time, intelligence organizations, data bases, and products must be available to develop estimates, make decisions, and plan operations.

Relevant:

Intelligence must support the commander's concept of operation and the unit's mission. It must be tailored to the capabilities of the unit and intelligence priorities of the commander. Intelligence must be in usable format which meets the specific needs of the requestor and explains its own significance.

Accurate:

Intelligence must give the commander a balanced, complete, and objective picture of the enemy and the operational environment. It should support and satisfy the priorities of the commander. To the extent possible, intelligence should correctly identify threat intentions, capabilities, limitations, and dispositions. It should be derived from multiple sources and disciplines to minimize the possibility of deception or misinterpretation. Alternative or contradictory assessments should be presented, when necessary, to ensure balance and bias-free intelligence.

Predictive:

Intelligence should tell the commander what the enemy is doing, can do, and his most likely course of action (COA). It should anticipate the intelligence needs of the commander.

PRIMARY INTELLIGENCE TASKS

MI accomplishes its mission through six primary tasks which generate intelligence synchronized to support the commander's mission and intelligence requirements. The derived products assist the commander in focusing and protecting his combat power. Figure 2-2 illustrates how the six intelligence tasks aid the commander in decision making. The six tasks can be thought of as the METL for intelligence. As such, these tasks serve as a framework for intelligence training. The six intelligence tasks—

- Provide I&W.

Perform IPB.

- Perform situation development.
- Perform target developmehnt and support to targeting.
- Support force protection.
- Perform BDA.

INTELLIGENCE TASKS	COMMANDER's FOCUS	COMMANDER's DECISIONS
I&W ►	ORIENT ON CONTINGENCIES ►	Increase intelligence readiness? Implement OPLAN?
IPB ►	PLAN A MISSION ►	Which COA will I implement? Where is my main effort?
SITUATION DEVELOPMENT ►	EXECUTE AND MANAGE A PLAN ►	Are these enemy actions expected? Is a FRAGO required now?
TARGET DEVELOPMENT AND SUPPORT TO TARGETING ►	DESTROY/SUPPRESS/ NEUTRALIZE TARGETS ►	Does destruction of this target accomplish my objective? When do I execute this fire mission?
FORCE PROTECTION ►	SECURE THE FORCE ►	Is my intent obvious to the enemy? Will I launch a preemptive strike?
BDA ►	REALLOCATE INTELLIGENCE AND ATTACK ASSETS ►	Is my fire and maneuver effective? Do I refire the same targets?

Figure 2-2. The G2 (S2) tailors intelligence to the commander's needs.

Indications and Warnings:

The commander uses I&W for early warning to prevent surprise through anticipation and reduce the risk from enemy actions that are counter to planning assumptions. This enables him to quickly reorient the force to unexpected contingencies and shape the battlefield by manipulating enemy activities. I&W helps a commander decide whether to maintain or increase unit readiness levels if hostilities are likely. In force projection operations, I&W provides the commander time to plan and surge the intelligence effort for the impending operation. Detection of developments which initiate force projection operations requires that intelligence readiness be developed and maintained through pre-crisis intelligence operations.

The commander and G2 (S2) integrate intelligence requirements to support I&W into the total unit collection plan. Collection plans and supporting SORs are developed during the decision making process. The G2 (S2) develops reporting procedures (for example, "FLASH" designation) in support of I&W requirements to ensure the commander can implement the appropriate OPLAN in a timely manner.

During war an OOTW, the G2 (S2) identifies those actions by threat and potential threat groups that would change the basic nature of the operations. Examples of such activities include--

- First use of weapons of mass destruction (nuclear, biological, and chemical [NBC] weapons).
- First violation of international treaties.
- Introduction of weapons to counter a specific friendly advantage or strength.
- Unexpected commitment of threat forces into the battle space.
- Unexpected changes in the threat's intent, will, or targets.
- Changes in the population's support to friendly operations.

In all cases, I&W alerts the unit commander to move the unit from its current mission to a contingency, branch, or sequel operation.

Intelligence Preparation of the Battlefield:

The commander uses IPB to understand the battlefield and the options it presents to friendly and threat forces. IPB is a systematic, continuous process of analyzing the threat and environment in a specific geographic area. The process consists of four steps: defining the battlefield environment; describing the battlefield effects; evaluating the threat; and determining threat COAs. By applying the IPB process, the commander gains the information necessary to selectively apply and maximize his combat power at critical points in time and space on the battlefield.

The commander focuses the G2 (S2) effort and the IPB process by clearly defining his PIR. The G2 (S2) then uses the IPB process to continually assess threats to, and opportunities for, the friendly force. This assessment helps the commander initiate OPLANs, branches, and sequels. The IPB process and access to the intelligence system also allows logistics planners to develop the logistics preparation of the theater plan and other support plans.

Using the IPB process, the G2 (S2) predicts threat COAs and identifies the events that will enable them to confirm or deny each threat COA. The commander and staff use the results to wargame threat COAs against friendly actions, evaluate future threat actions, and perform situation and target development. This generates refined intelligence requirements which the

G2 (S2) staff includes in the intelligence synchronization matrix as well as the decision support template (DST) produced by the G3 (S3). These products support the commander and staff in decision making by developing specific unit OPLANs or OPORDs. As shown in Figure 2-3, the G2 (S2) must have some basic IPB products ready before the staff begins each step of the staff planning process. For more information on IPB, refer to FM 34-130.

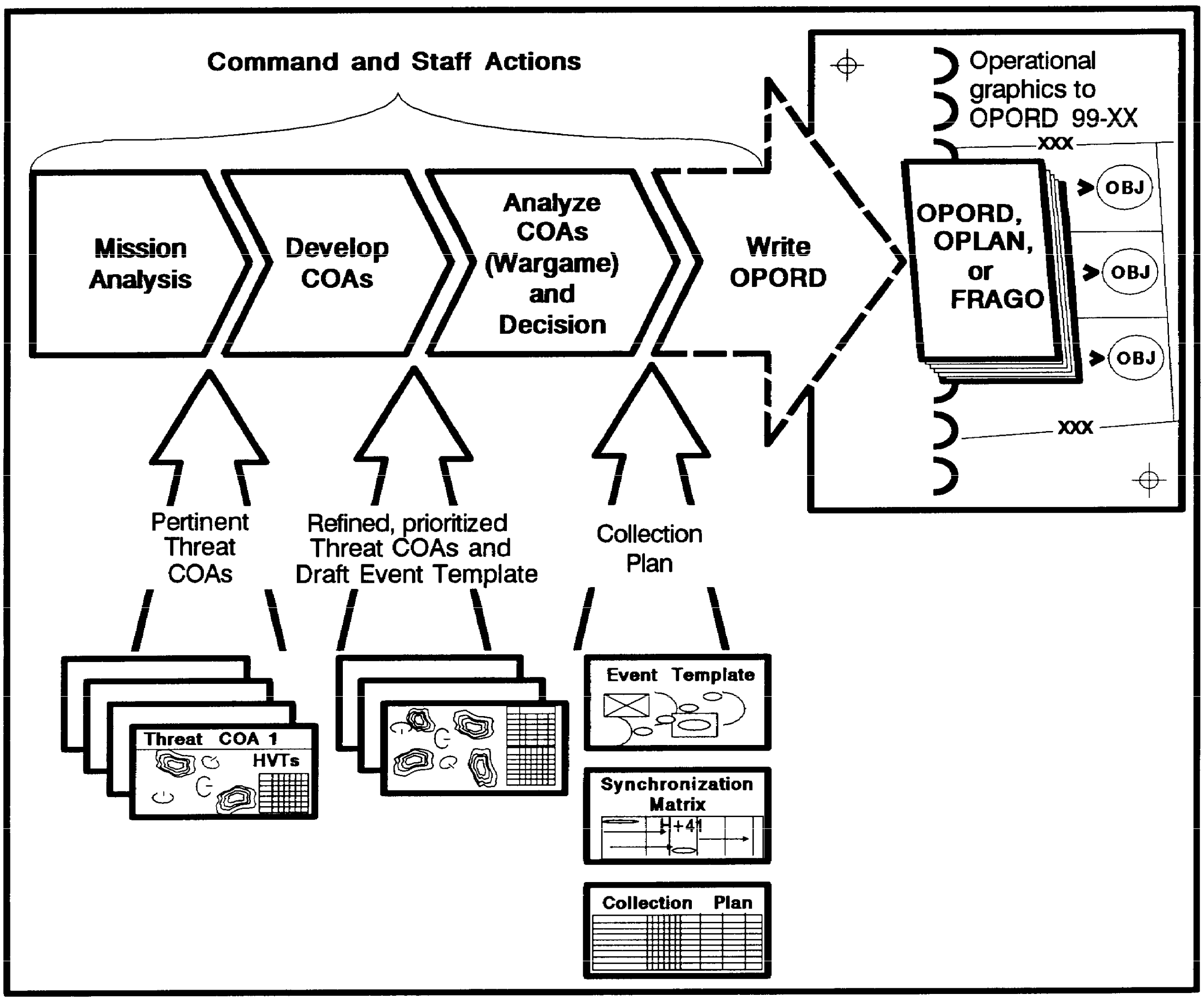
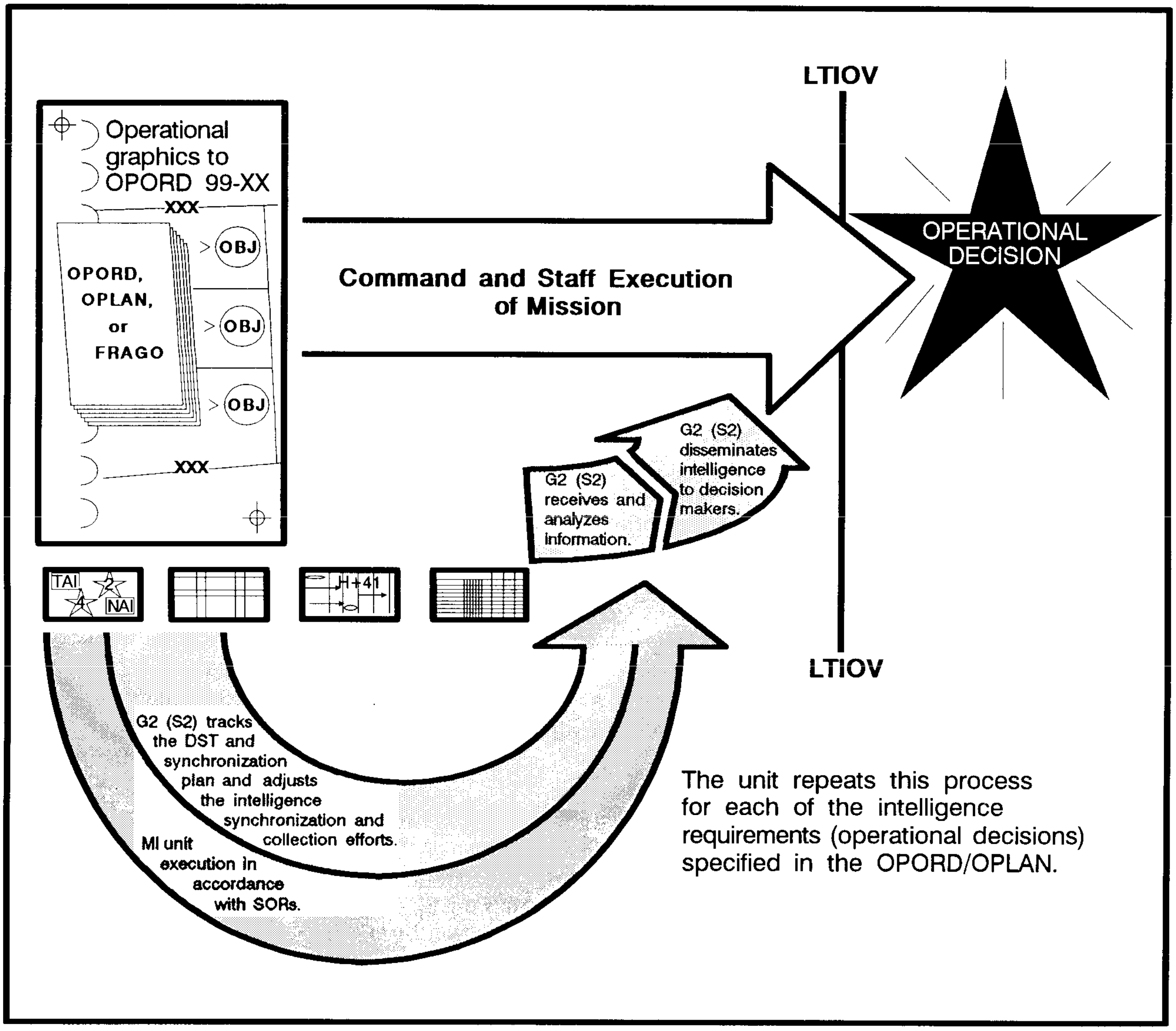

Command and Staff Actions
Mission Analysis
Develop COAs
Analyze COAs (Wargame) and Decision
Write OPORD
Operational graphics to OPORD 99-XX
XXX
OPORD, OPLAN, or FRAGO
OBJ
OBJ
OBJ
XXX
Pertinent Threat COAs
Refined, prioritized Threat COAs and Draft Event Template
Collection Plan
Threat COA 1
HVTs
Event Template
Synchronization Matrix
H+4
Collection Plan

Figure 2-3. The G2 (S2) must support the decision making process with specific products.

Situation Development

The commander uses situation development to help understand the battlefield, thereby reducing risk and uncertainty while executing his plan. Situation development provides an estimate of the enemy's combat effectiveness. Based on the results of continuous IPB, it confirms or denies enemy COAs and explains what the enemy is doing in relation to the friendly Fforce commander's intent. Situation development helps the commander in his decisions to execute branches and sequels as the operation develops.

In situation development, the G2 (S2) and collection manager use the DST, collection plan, intelligence synchronization matrix, and SOR. The G2 (S2) uses these tools to state types of information needed, the degree of specificity, and the latest time information is of value (LTIOV). These products synchronize intelligence requirements to the decisions that the commander and staff expect to make during the upcoming operation. See Figure 2-4.


LTIOV
Operational graphics to OPORD 99-XX
XXX
OPORD, OPLAN, or FRAGO
OBJ
OBJ
OBJ
XXX
Command and Staff Execution of Mission
OPERATIONAL DECISION
G2 (S2) disseminates intelligence to decision makers.
G2 (S2) receives and analyzes information.
TAI
2
4
NAI
H+4
LTIOV
G2 (S2) tracks the DST and synchronization plan and adjusts the intelligence synchronization and collection efforts.
MI unit execution in accordance with SORs.

The unit repeats this process for each of the intelligence requirements (operational decisions) specified in the OPORD/OPLAN.

Figure 2-4. The G2 (S2) must synchronize intelligence requirements.

As the battle, operation, or campaign progresses, the G2 (S2) uses the intelligence synchronization matrix and DST to anticipate which decisions the commander and staff will soon make. The G2 (S2) and collection manager implement the intelligence synchronization and collection plan by issuing SORs to intelligence BOS units, including non-Ml units. SORs explicitly state the information required, where to focus collection, the LTIOV, and where to report the information. The G2 (S2) must anticipate future COAs to allow time for Ml assets to be tasked and repositioned. The G2 (S2) monitors and, when required, redirects intelligence operations to deliver the intelligence required for each decision in a timely manner.

Situation development is especially demanding for Ml units. As an asset manager, the Ml commander must anticipate and wargame the collection positions for each of his IEW systems throughout the operation. Based upon the results of this wargaming, the Ml unit commander may prompt the supported unit's staff to reconsider select elements of its plan.

Target Development and Support to Targeting:

The commander uses intelligence in target development to effectively employ nonlethal electronic attack (EA) and lethal fires. Target development provides targets and targeting for attack by fire, maneuver, and electromagnetic means. Our ability to broadcast target information to multiple echelons in NRT makes the "detect" function of targeting almost instantaneous. This demands that the "decide" phase of targeting be accomplished in detail as an integral part of the commander's concept of operation.

intelligence support to target development provides targets and targeting to unit attack systems and collection assets for exploitation. The G2 (S2) uses the same techniques as described in the IPB and Situation Development sections above. Additionally, during wargaming, the G2 (S2) participates in the targeting process led by the fire support officer (FSO). During the "decide" function of the targeting process, the G2 (S2) will identify the high-value targets (HVTs) which are critical to the enemy commander's COA. Through wargaming, the targeting team or board reduces this set of targets to the high-payoff targets (HPTs). HPTs are HVTS which must be acquired, tracked, and successfully attacked in order for the commander's mission to succeed. The G2 (S2) advises the commander on the viability of collection against each HPT.

As required, the G2 (S2) establishes procedures for the direct "sensor to shooter" dissemination of targeting information from collection assets to the fire support element (FSE) and targeting cell. Direct dissemination enables the FSE and targeting cell to rapidly pass identified HPTs and other targets directly to the FSE of the supporting unit or, if authorized by the commander, to the firing unit. The G3 (S3) and FSO must identify the requirements for direct dissemination during the "decide" phase of the targeting process. The G2 (S2) and FSO must also establish controls in the "detect" phase to revalidate planned targets. The G2 (S2) must incorporate these requirements into the SOR and establish a system to track the status of each request. These procedures require considerable coordination between the commander, G3 (S3), G2 (S2), electronic warfare officer (EWO), FSO, field artillery intelligence officer, MI unit, and firing unit to be effectively executed. Additionally, targeting information relating to deep attack must be disseminated to elements such as the Deep Operations Coordination Cell (DOCC). The ACE is a crucial interface with the DOCC for intelligence support to the deep battle.

Commanders, G3s (S3s), G2s (S2s), and fire support personnel must realize that risks are inherent when acting upon NRT targeting information, particularly in an automated environment. Criteria should be established for using and confirming NRT targeting information to reduce the possibility of engaging the wrong enemy target or, worse, friendly forces. In addition, automation in the targeting process should not replace the human check and balance system needed to reduce the possibility of fratricide, For more information on the targeting process and intelligence, refer to FM 6-20-10.

Force Protection

The commander uses the Intelligence 80S to support force protection. Intelligence operations—MDCl operations in particular—identify, locate, and target an enemy's ability to target and affect friendly forces, facilities, and operations. Intelligence support to force protection must—

- Identify and counter enemy intelligence collection capabilities.
- Assess, through MDCI, friendly vulnerabilities and the threat's ability to exploit those vulnerabilities.
- Identify the enemy's perception of friendly centers of gravity and how he will attack or influence them.
- Identify potential countermeasures to deny the enemy access to friendly critical areas.
- Conduct threat and risk assessment.

With this intelligence, the commander decides which countermeasures must be used to shield his intentions, present false images to the enemy commander, and protect his force, Commanders and staffs use force protection intelligence to—

- Enable the commander to plan for passive and active OPSEC, counterreconnaissance, deception, and other security measures.
- Plan health service support, logistics operations, and troop safety measures.
- Reduce the probability of fratricide by accurately locating enemy forces through timely IPB and situation development.
- Contribute to threat avoidance once the risk is identified,

Force protection prompts the commander and staff to develop countermeasures against the threat's best opportunities. These are usually in the form of preventive measures (for example, levels of readiness) and reactionary measures (for example, quick reaction forces), The preventive measures do not require support by a new intelligence requirement, but the reactionary measures might, The G2 (S2) also establishes appropriate reporting procedures (for example, FLASH precedence reporting) for force protection intelligence similar to those used for reporting I&W intelligence. Additionally, the G2 (S2) should periodically prompt a review of friendly vulnerabilities and the threat's ability for exploitation.

Users of force protection intelligence support vary widely across the battlefield. For example-

- Commanders and G3s (S3s) need to know the effectiveness of deception operations.
- G2 (S2) and G3 (S3) staffs use it to plan aggressive force protection measures such as deception and counterreconnaissance, intelligence, surveillance, and target acquisition (C-RISTA).
- OPSEC and deception managers need to know where enemy intelligence assets are focused.
- Leaders of all units need to know which OPSEC countermeasures are effective and necessary, and which measures can be eliminated.
- Headquarters commandants, Level II response forces, and rear area commanders need to know the likelihood of Levels I and II threats to the rear area so they will know which security measures are necessary and which are unnecessary. For more information on threat levels, refer to FM 34-52.
- CA and PSYOP personnel use force protection intelligence to ensure that their activities support deception and Cl operations.

Battle Damage Assessment

Intelligence supports the assess phase of the targeting process through the BDA process. The commander uses BDA to determine if his operational and targeting actions have met his conditions for initiating subsequent COAs or beginning the next phase of an operation. If the desired operational conditions have not been met, BDA gives the commander the information necessary to decide *if*, *when* and *how* the targets should be reengaged. It also estimates the enemy's remaining military capabilities and potential at different points throughout the mission or operation.

BDA is the timely and accurate estimate of damage resulting from the application of military force, either lethal or nonlethal, against an objective or target. BDA includes physical and functional damage assessments as well as target system assessment. The most accurate BDA is derived from multiple sources and the results of all-source analysis. Although producing BDA is primarily an intelligence responsibility, it requires extensive coordination with operational elements to be effective. It also requires that common procedures and methodology be established which synchronize and integrate Army BDA with those at joint and national levels.

The commander, supported by the G2 (S2), must decide what critical areas require BDA to determine if the targeting effect for operational success has been achieved. These areas form the commander's BDA-related PIR and must be prioritized against his other PIR developed during the targeting process. The G2 (S2) integrates the commander's BDA-related PIR into the intelligence collection plan and synchronizes their collection with the target engagement windows. Since allocating collection resources for acquiring and tracking damage could divert IEW assets from other missions, BDA-related PIR should only address the commander's most critical requirements. The G2 (S2) ensures intelligence collected on BDA-related PIR is integrated into the targeting process, specifically the G3 (S3) combat assessment.

BDA is a complex and dynamic process which seldom falls out of routine intelligence collection. Commanders and staffs must conduct front-end analysis and establish criteria to identify the precise operational and targeting effect required to support specific decisions. Success in the BDA process and the combat assessment function of the targeting process are achieved when the commander has the information necessary to quickly decide-

- When to proceed with his original concept of operations and schedule of fires.
- When to restrike a target to ensure the desired effect is accomplished.
- When to execute a branch to the operation because the desired effect cannot be achieved with constrained resources.

THE INTELLIGENCE CYCLE

Intelligence operations follow a five-step process known as the intelligence cycle. The intelligence cycle is focused on the commander's mission and concept of operation. The overarching principle of the cycle is intelligence synchronization. Each step within the cycle must be synchronized with the commander's decision making and operational requirements to successfully influence the outcome of the operation. See Figure 2-5.

Plan and Direct:

IPB is the primary intelligence task which helps the G2 (S2) focus and direct this step and the remaining steps of the intelligence cycle. Planning and directing involves task organizing Ml assets; identifying personnel, logistics, and communications requirements; identifying, prioritizing, and validating intelligence requirements; developing a collection plan and synchronization matrix; issuing SORs for collection and production; and monitoring the availability of collection information.

Collect:

Collecting is acquiring information and providing this information to the processing and production elements. It includes the maneuver and positioning of intelligence assets to locations favorable to satisfying collection objectives.

Process:

Processing is the conversion of collected information into a suitable form that can be readily used to produce intelligence. Processing includes data form conversion, photographic development, and transcription and translation of foreign language material. As with collection management, processing must be prioritized and synchronized with the commander's PIR. Effective processing management ensures that critical information is extracted and processed ahead of information of lesser immediate value.

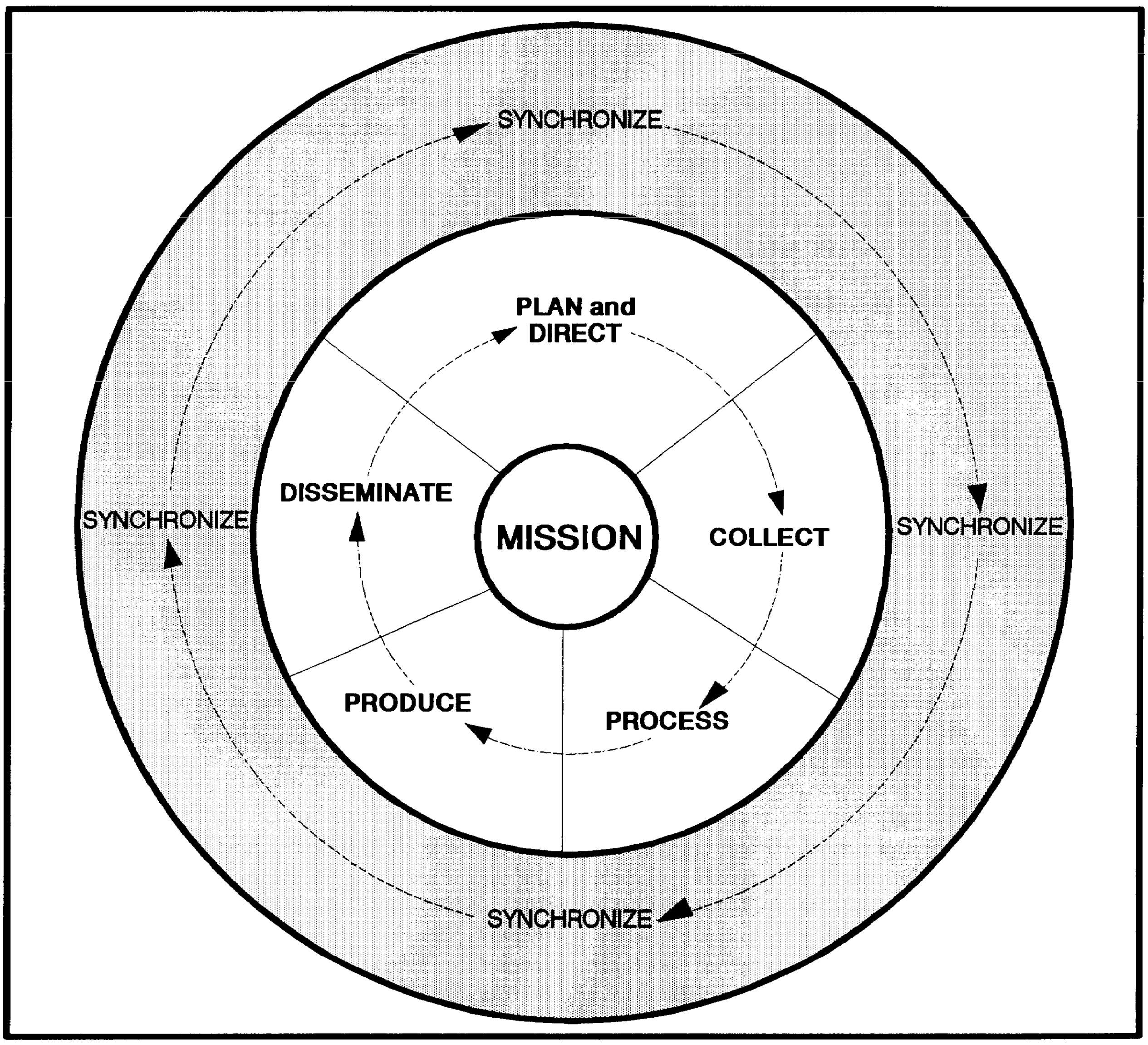

SYNCHRONIZE
PLAN and DIRECT
SYNCHRONIZE
DISSEMINATE
MISSION
COLLECT
SYNCHRONIZE
PRODUCE
PROCESS
SYNCHRONIZE

Figure 2-5. The intelligence cycle.

Produce

Producing involves the integration, evaluation, analysis, and synthesis of information from single or multiple sources into intelligence. At the tactical level, time constraints and demands of the battle tend to make the processing and producing steps indistinguishable.

Disseminate:

Disseminating intelligence is the timely conveyance of intelligence to users in a usable form. The diversity of forms and means requires interoperability among command, control, communications, and intelligence (C^3I) systems.

The intelligence cycle is a continuous process in which steps are executed concurrently, though not always sequentially. For example, while new information is being collected to satisfy one set of requirements, the G2 (S2) plans and redirects efforts to meet new demands while intelligence produced from previously collected information is disseminated. One or several iterations of the intelligence cycle may be conducted depending on the time constraints of the mission.

COMMANDER'S INTELLIGENCE REQUIREMENTS

The commander directs the intelligence effort by selecting and prioritizing intelligence requirements. They support the commander in conducting and planning operations. The information the commander needs to visualize the outcome of current operations is called the commander's critical information requirements (CCIRs). CCIRs include information on both friendly and threat forces. The threat information portion of the CCIR are the commander's PIR. In designating PIR, the commander establishes—

- **What** he wants (intelligence required).
- **Why** he wants it (dependent decision).
- **When** he wants it (LTIOV).
- **How** he wants it (format, method of delivery).

The commander uses the decision making process to define PIR, select friendly COAs, and refine intelligence requirements. The decision making process includes mission analysis; developing COAs; analyzing and comparing COAs; decision making; and execution. The staff assists the commander in developing intelligence requirements and will generate additional ones in support of the concept of operation and targeting as needed. Each requirement supports a decision expected to occur during the execution of the selected COA. The commander and staff establish these requirements to fill the gaps and voids in the unit's common understanding of the battlefield as shown in Figure 2-6.

For more information on PIR development, refer to FM 34-2, Appendix B, and FM 34-8, Appendix A.

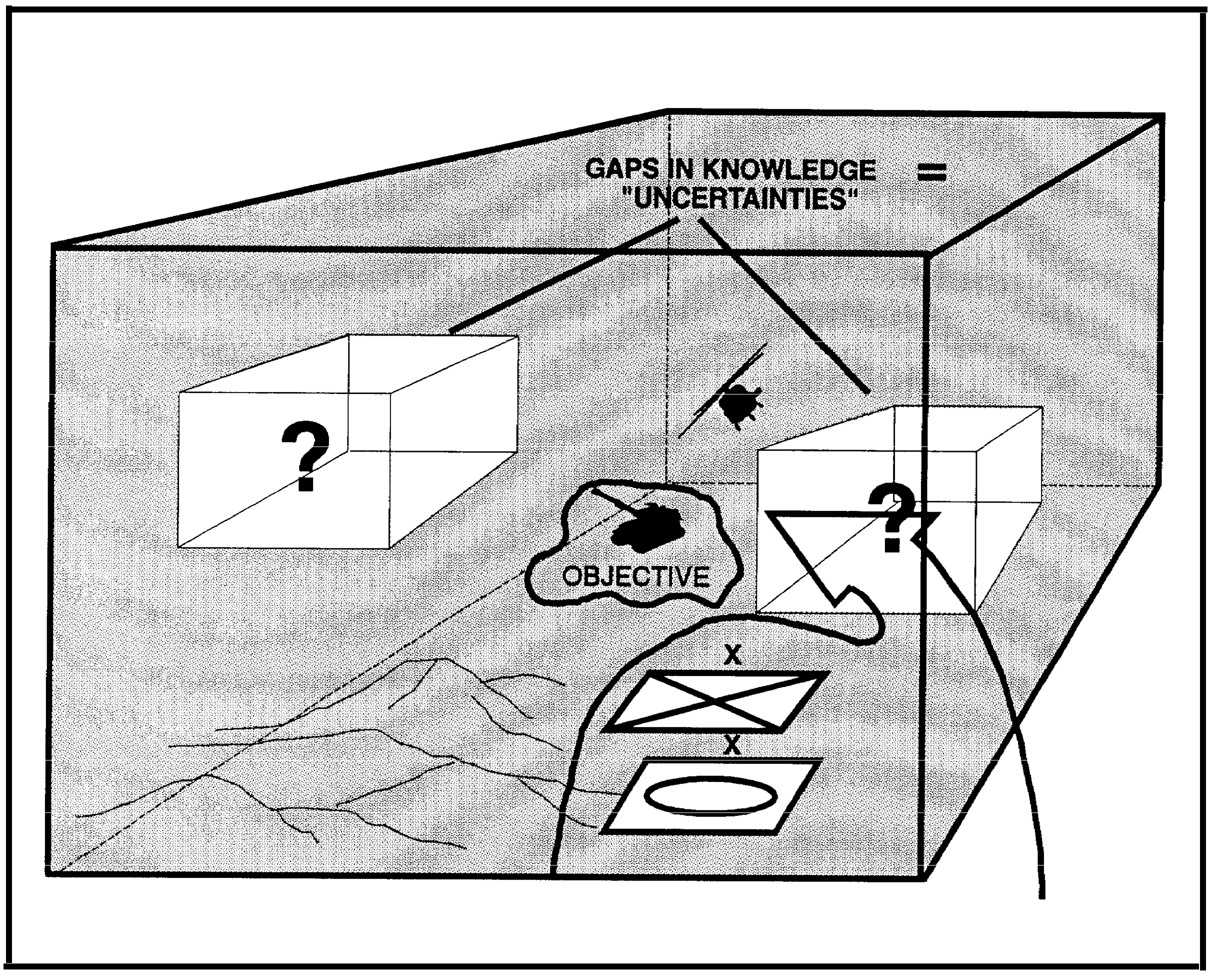


Figure 2-6. The common understanding of the battlefiled

Mission Analysis:

The commander uses IPB products to assess the facts about the battle space and to understand how friendly and threat forces will interact on the battlefield. Mission analysis, supported by IPB, identifies gaps in the command’s knowledge of threat forces, the operational environment, and its effects on potential COAs. During mission analysis, the commander identifies his CCIR which provide the G2 (S2) with initial PIR.

Develop Courses of Action:

The commander and staff develop friendly COAs based on facts and assumptions identified during mission analysis. The G2 (S2) ensures that realistic expectations of the intelligence BOS are considered when developing friendly COAs and that most likely enemy COAs are accurately presented.

Analyze and Compare Courses of Action:

Using wargaming, the commander and staff “fight” the set of threat COAs against each potential friendly COA. This enables them to assess when and where they might require intelligence about the threat or events at key areas. These key areas become named areas of interest (NAIs). When, as a result of wargaming, the commander determines he must make a decision based on activity at an NAI, that NAI becomes a decision point (DP) or creates a DP related to that NAI. The information needed by the commander to make that decision becomes an intelligence requirement.

Among the tools the staff uses to record the results of wargaming are the DST and BOS synchronization plan. The DST normally depicts DP and time phase lines (TPLs) associated with an event or decision as well as the commander's options. The synchronization plan supports the DST. It depicts NAIs and DPs, the LTIOV, the commander's options for each BOS, and TPLs associated with a DP and the commander's options.

The G2 (S2) incorporates NAIs, decision points, and HPTs identified during the wargame into a prioritized list of intelligence requirements. He develops and evaluates collection strategies for each intelligence requirement and ensures that intelligence collection is capable of supporting the friendly COA.

Decision Making:

The commander, with staff recommendations, decides upon a COA and issues implementing orders. He approves the intelligence requirements associated with that COA and designates the most important as PIR.

The commander prioritizes the complete set of intelligence requirements which includes his—

- Own command.
- Subordinate commands and adjacent units in the form of specific requests for intelligence.
- Higher command in the form of specific requests for intelligence.

PIR are the key intelligence requirements, listed in priority order, which the unit must answer or satisfy to achieve mission success. PIR support the planned operation and associated branches and sequels. The commander's PIRs drive the intelligence cycle.

Execution:

The G2 (S2) synchronizes the intelligence operation with the combat operation to ensure the Intelligence BOS provides the required intelligence when needed. He identifies the indicators and specific information requirements (SIR) necessary to satisfy each PIR. The G2 (S2) will allocate most of his efforts to those requirements designated as PIR, and develops a collection plan and synchronization matrix. This collection plan includes direction to organic assets and coordination with higher echelons for collection requirements beyond the organic capabilities of the unit.

The collection management and synchronization process orchestrates, prioritizes, and focuses the Intelligence BOS. The plan includes the collection, processing, and dissemination required to support each intelligence requirement, The intelligence synchronization matrix ensures intelligence collection, analysis, and dissemination are in concert with the commander's operation. Synchronization ensures the commander receives the intelligence he needs, in the form in which he can use it, and in time to influence his decision making.

As the commander executes his selected COA, the G2 (S2) and collection manager monitor the execution of the collection plan. They use the intelligence synchronization matrix to ensure-

- Collection assets are focused on the proper PIR at each stage of the operation.
- Intelligence, required to support the commander's decisions, is delivered on time.

As information arrives, the G2 (S2) uses various techniques to keep track of the degree to which PIR are satisfied, understanding that 100 percent satisfaction rarely occurs, Using the intelligence cycle, the commander and G2 (S2) continually prioritize the set of requirements and reassess the designation of PIR as the operation progresses.

For more information on the decision making process, collection management, and intelligence synchronization, refer to FM 34-2 and FM 101-5.

ELECTRONIC WARFARE

> *When developing the concept of operations, tactical commanders should consider E W assets the same* as *they do* artillery assets.
>
> —FM 100-5, 14 June 1993

EW is an essential component of command and control warfare (C^2W). As part of C^2W, EW is used in conjunction with MDCI to protect friendly command and control (C^2) while attacking the enemy's C^2 structure. Effective use of EW as a decisive element of combat power requires coordination and integration of EW operations with the commander's scheme of maneuver and fire support plan. The integrated use of EW throughout the battlefield supports the synergy needed to locate, identify, damage, and destroy enemy forces and their C^2 structure.

ELECTRONIC WARFARE COMPONENTS

EW is an overarching term that includes three major components: electronic attack (EA), electronic warfare support (ES), and electronic protection (EP). The overlapping ovals in Figure 2-7 illustrate that some EW actions are both offensive and protective and may use ES in their execution, Other EW functions, such as the use of wartime reserve modes (WARM), can fall under either EA or EP. The actions listed under each of the major components are illustrative, not all-inclusive.

Electronic Attack

EA uses lethal (directed energy) and nonlethal (jamming) electromagnetic energy to disrupt, damage, destroy, and kill enemy forces. MI units use nonlethal EA to jam enemy C^2 and targeting systems. It can also support psychological and deception operations. Jamming degrades or denies the enemy effective use of his C^2 and targeting systems. Electronic deception causes an enemy to misinterpret what is received by his electronic systems. For more information on Electronic Attack, refer to FMs 24-33, 34-40(S), and 34-40-7.

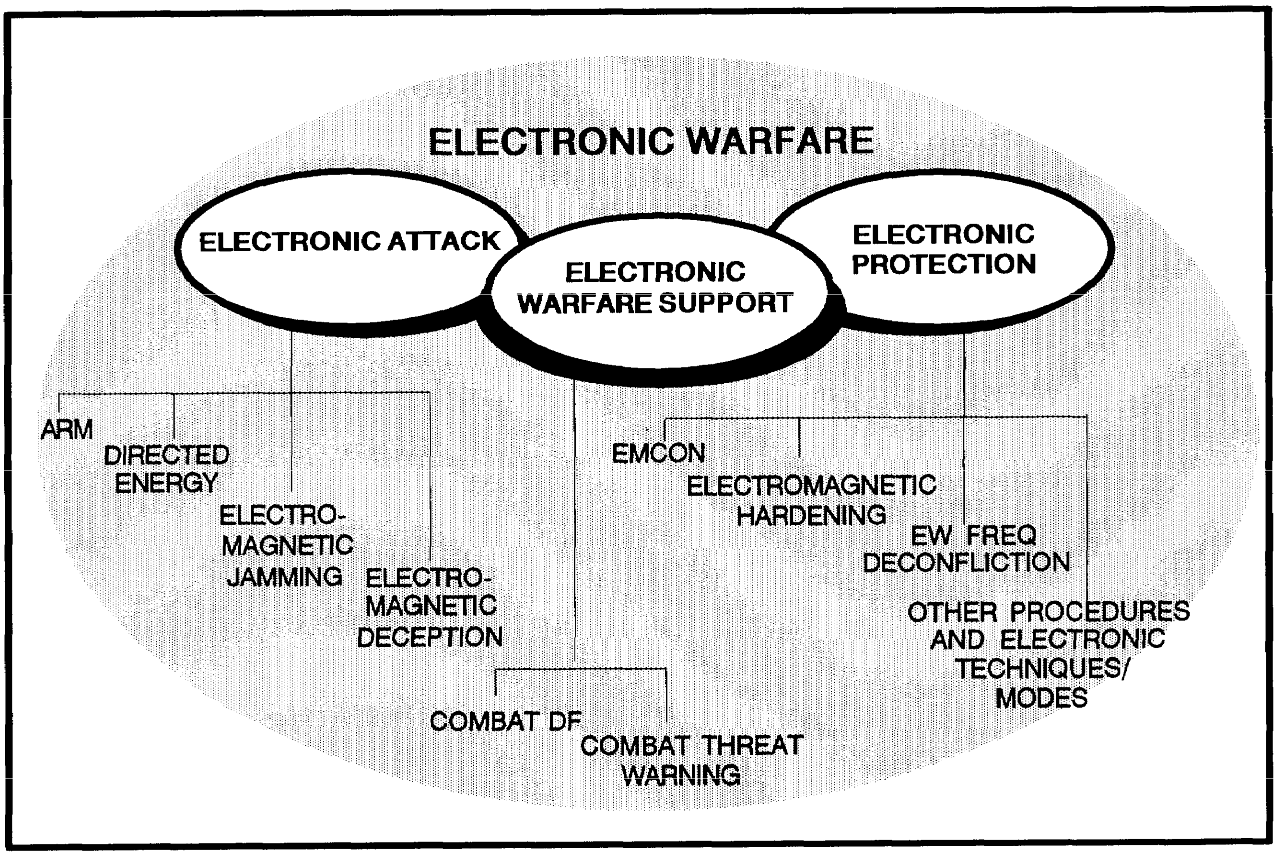

ELECTRONIC WARFARE
ELECTRONIC ATTACK
ELECTRONIC WARFARE SUPPORT
ELECTRONIC PROTECTION
ARM
DIRECTED ENERGY
ELECTRO-MAGNETIC JAMMING
ELECTRO-MAGNETIC DECEPTION
COMBAT DF
COMBAT THREAT WARNING
EMCON
ELECTROMAGNETIC HARDENING
EW FREQ DECONFLICTION
OTHER PROCEDURES AND ELECTRONIC TECHNIQUES/ MODES

Figure 2-7. The scope of electronic warfare.

Electronic Warfare Support

ES gathers information by intercepting, locating, and exploiting enemy communications (radios) and noncommunications emitters (radars). ES gives the commander timely information upon which he can base his immediate decisions. Intelligence obtained through ES supports all-source analysis, EA, and EP. As one source of combat information, ES focuses on the commander's immediate needs for identifying the enemy's intent and obtaining targeting information.

Electronic Protection:

EP protects personnel, facilities, or equipment from the effects of friendly or enemy EW which degrades or destroys friendly communications and noncommunications capabilities. Good electromagnetic emanations practices are the key to a successful defense against the enemy's attempt to destroy or disrupt our communications and noncommunications systems. Proper management of electromagnetic emanations makes the use of our communications equipment appear to be without pattern; as a result, it is difficult for the enemy to target and is consistent with good EP practices. For more information on Electronic Protection, refer to FM 24-33 and FM 34-40(S).

Army EW operations are developed and integrated as part of the commander's overall concept of operations. The execution of EW operations occurs across all BOSS and units. EW often provides commanders with substantial capabilities to electronically influence and control the battlefield.

CHAPTER 3

FORCE PROJECTION OPERATIONS

> *If I always appear prepared, it is because before entering on an undertaking, I have meditated for long and foreseen what may occur.*
>
> —Napoleon Bonaparte, 1769-1821

In the force projection era, the Army relies largely on a CONUS-based force with a relatively small forward presence that can rapidly project combat power anywhere in the world. IEW provides the commander with the intelligence he needs to successfully plan and execute force projection operations. As stated in Chapter 1, IEW support to force projection operations rests on the understanding of five principles: the commander drives intelligence, intelligence synchronization, split-based operations, tactical tailoring, and broadcast dissemination. These principles, executed in joint, combined, or interagency environments, are critical to successful force projection operations.

PEACETIME IEW OPERATIONS

Successful IEW support during force projection operations relies on continuous peacetime information collection and intelligence production. Peacetime IEW operations support contingency planning and develop baseline knowledge of multiple potential threats and operational environments. They engage and challenge the Intelligence BOS to respond effectively to the commanders' contingency planning intelligence requirements. During peacetime, commanders conduct critical examinations of Ml force structures, operations, and training. These examinations ultimately lead to a mission-ready IEW force which supports the needs of the commander, and meets the key force projection imperatives of flexibility, scalability, and tailorability.

Peacetime IEW operations are particularly important to corps and division commanders. In force projection operations, the Army force (ARFOR) in the joint force will be drawn largely from CONUS-based corps and divisions. In addition, a corps or division commander could also be appointed the ARFOR or JTF commander. Corps and division commanders must, therefore, be prepared not only to provide the ARFOR to the JTF but also to assume the duties of the ARFOR or JTF commander. Both responsibilities require the commander to place additional emphasis on intelligence readiness. The corps and division commanders need intelligence to support contingency-based training and planning. They need the broad understanding of the operational environment of the contingency area that comes from continuous interaction with higher echelon and joint intelligence organizations. Commanders must focus and drive the intelligence system daily to ensure this support is available and that their forces and staffs are ready to conduct force projection operations.

IEW AND THE STAGES OF FORCE PROJECTION

IEW supports the eight stages of force projection operations.

- Mobilization.
- Predeployment activity.
- Deployment.
- Entry operations.
- Operations.
- War termination and postconflict operations.
- Redeployment and reconstitution.
- Demobilization.

These stages are not necessarily distinct or sequential and therefore present the commander with planning and execution challenges. Intelligence personnel and organizations must be prepared to assist the commander in overcoming these challenges.

IEW operations must anticipate, identify, consider, and evaluate all potential threats to the force as a whole throughout force projection operations. This is especially critical during the deployment and entry operations stages of force projection. During these stages, US Forces are particularly vulnerable to threat actions. Intelligence personnel must, therefore, emphasize the delivery of I&W products that indicate a basic change to the nature of US operations in theater.

Mobilization:

Mobilization is the process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. The Army Mobilization and Operations Planning and Execution System (AMOPES) and FM 100-17 provide guidance for mobilization of assets for contingencies and large protracted conflicts or wars. To prepare for and execute mobilization, commanders and G2s (S2s) should consider the following:

- In peacetime, Active Component (AC) and Reserve Components (RC) units plan, train, and prepare to accomplish mobilization and deployment tasks. MI units establish habitual training relationships with their supported AC and RC units as well as higher echelon intelligence organizations as identified in existing OPLANs.
- Force requirements are identified in OPLANs and concept plans. Reserve augmentation programs organize and integrate AC and RC MI units to meet the requirements in these plans. Individual manpower requirements for military, civilian, and contractor personnel are also identified.

- Selected RC MI units and individuals are alerted then proceed to designated mobilization stations.

- At higher echelons, mobilization prompts MI units that are consolidated for training to detach their assets to deploying forces.

- Mobilization stations and parent units will begin providing current intelligence to their RC units as mobilization begins.

Predeployment Activity:

Predeployment activity provides the foundation for subsequent force projection operations. During this stage, commanders ensure AC and RC MI organizations are trained and equipped to conduct IEW operations. Commanders integrate mobilization and deployment tasks into unit METL and training. Commanders also emphasize and integrate critical aspects of force projection into battle tasks and planning.

In planning force projection operations, the commander establishes intelligence requirements which direct peacetime intelligence operations supporting contingency planning. Key contingency planning ingredients are to stay out front in intelligence planning by developing broad baseline knowledge on contingency areas, and to understand how to get intelligence support. As OPLANs are activated, the commander focuses on intelligence to support specific mission decisions and planning requirements. In addition, the commander begins planning for the crossover point in intelligence when initial reliance on higher echelon intelligence is replaced by tactical IEW assets within the AO. See Figure 3-1.

The G2 (S2) supports peacetime contingency planning with IPB products and data bases on likely contingency areas. The OPLAN identifies the IEW requirements supporting that plan, to include--

- Identification of MI units providing IEW support, both in and outside the AO

- Command and support relationships of collection assets (agencies and systems) at each echelon.

- Report and request procedures not covered in unit tactical standing operating procedures.

- Sequence of deployment of MI personnel and equipment. Early deployment of key MI personnel and equipment is essential for force protection and combat readiness. Composition of initial and follow-on deploying IEW assets is influenced by MEIT-T, availability of communications, availability of lift, and ability of the national collection system to support the operation.

- Communications architecture supporting both intelligence staffs and collection assets. Signal commands must be involved in communications planning.

- Friendly vulnerabilities to hostile intelligence threats and plans for conducting OPSEC, deception, and other force protection measures. MDCI personnel must begin this type of planning as early as possible to ensure adequate force protection of deploying and initial entry forces.

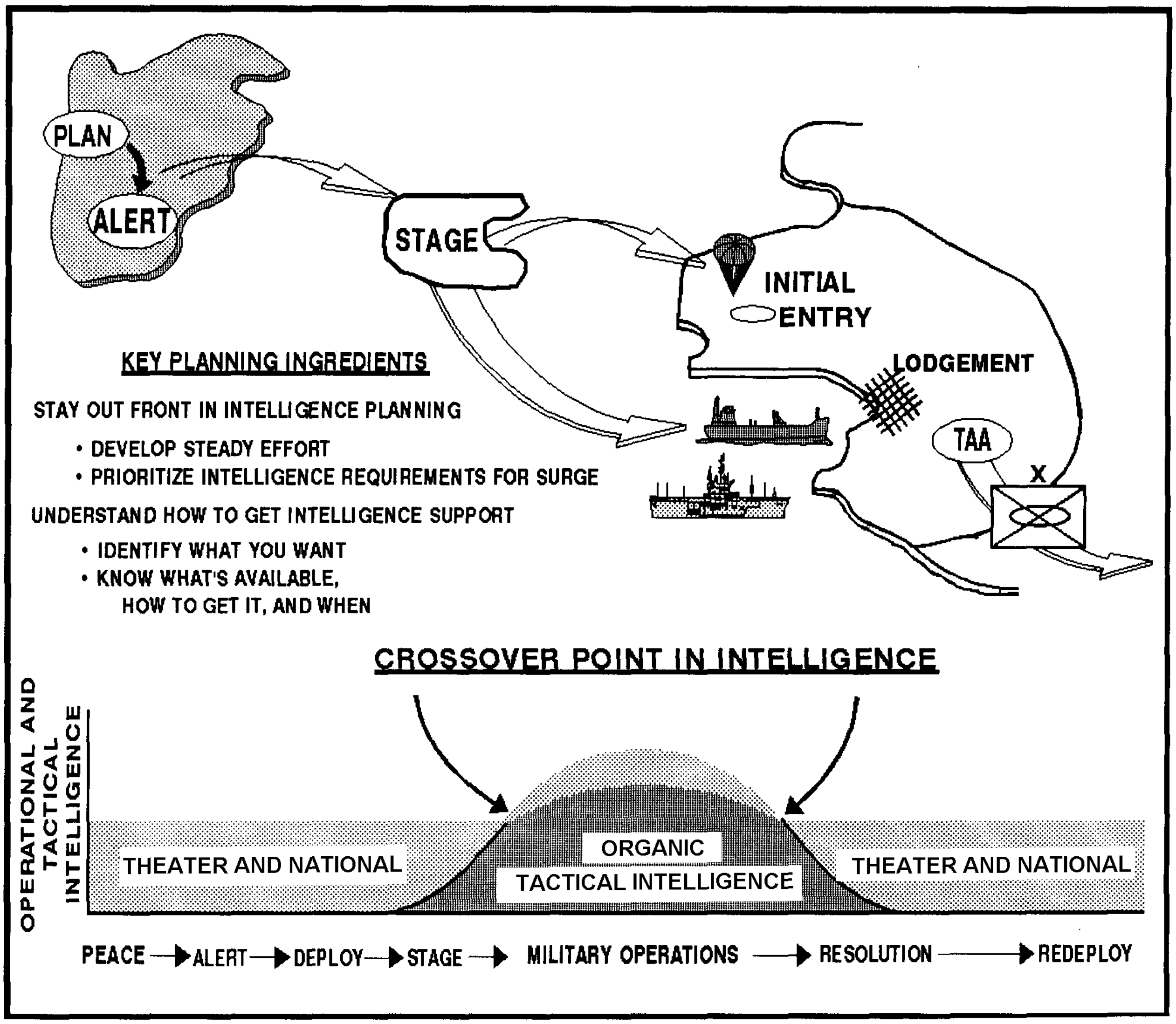

PLAN
ALERT
STAGE
INITIAL ENTRY
LODGEMENT
TAA
X
KEY PLANNING INGREDIENTS
STAY OUT FRONT IN INTELLIGENCE PLANNING
• DEVELOP STEADY EFFORT
• PRIORITIZE INTELLIGENCE REQUIREMENTS FOR SURGE
UNDERSTAND HOW TO GET INTELLIGENCE SUPPORT
• IDENTIFY WHAT YOU WANT
• KNOW WHAT'S AVAILABLE, HOW TO GET IT, AND WHEN
CROSSOVER POINT IN INTELLIGENCE
OPERATIONAL AND TACTICAL INTELLIGENCE
THEATER AND NATIONAL
ORGANIC
TACTICAL INTELLIGENCE
THEATER AND NATIONAL
PEACE → ALERT → DEPLOY → STAGE → MILITARY OPERATIONS → RESOLUTION → REDEPLOY

Figure 3-1. Force projection intelligence planning.

The OPLAN also establishes collection strategies and plans that will activate upon alert notification. For smooth transition from predeployment to entry, intelligence staffs must coordinate collection and communications plans before the crisis occurs.

The G2 (S2) and MI units must continually monitor and update their OPLANs to reflect the evolving situation, especially during crisis situations. National intelligence activities monitor regional threats throughout the world and can answer some intelligence requirements supporting the development of OPLANs. The commander and G2 (S2) must be proactive in focusing national and theater intelligence on emerging requirements.

Upon alert notification, intelligence staffs update estimates and IPB products needed to support command decisions on force composition, deployment priorities and sequence, and the AO. At the strategic level, planners use the updated IPB products to assist in developing the logistics preparation of the theater plan which attempts to minimize requirements for strategic lift and maximize the in-theater support capabilities. MI organizations at all echelons reassess their collection requirements immediately after alert notification. Collection managers begin verifying planning assumptions within the OPLANs. MDCI and other IEW personnel provide force protection support to optimize OPSEC and antiterrorism measures.

Throughout the predeployment and deployment stages, intelligence activities provide deploying forces with the most recent intelligence on the AO. G2 (S2) and MI units also update technical data bases and situation graphics.

Deployment:

Success in force projection operations hinges on the capability of airlift and sealift assets to move forces to the AO, as well as the timely deployment of air- and seaport transportation, terminal, and deployment control units. The size and composition of forces requiring lift are based on METT-T, the availability of pre-positioned assets, the capabilities of host nation support, and the forward-presence of US Forces. Force or tactical tailoring is the process used to determine what is the correct mix and sequence of deploying units.

One of the first tailored IEW assets to deploy with the force G2 (S2) is the DISE. The DISE is the initial forward intelligence support team of split-based operations. The mission of the DISE is to provide the deployed commander accurate, detailed, continuous, and timely intelligence in support of the rapid introduction of US Forces. Depending on the size and mission of the deployed force, the DISE may be the only MI asset actually deployed in-country to support the G2 (S2). In large operations, the DISE may deploy with and support the early entry force G2 (S2) until the complete processing capability of the unit's ACE arrives. Once the ACE is in place, the DISE rejoins the ACE, moves forward to support the tactical command post, or moves to wherever its capabilities may be required. The two types of tailorable DISE configurations are the Mini-DISE (manportable packages), and DISE (vehicular). Together, these DISE configurations provide the commander with a robust intelligence capability in support of a deploying force. Figure 3-2 provides an example of two possible initial entry packages.

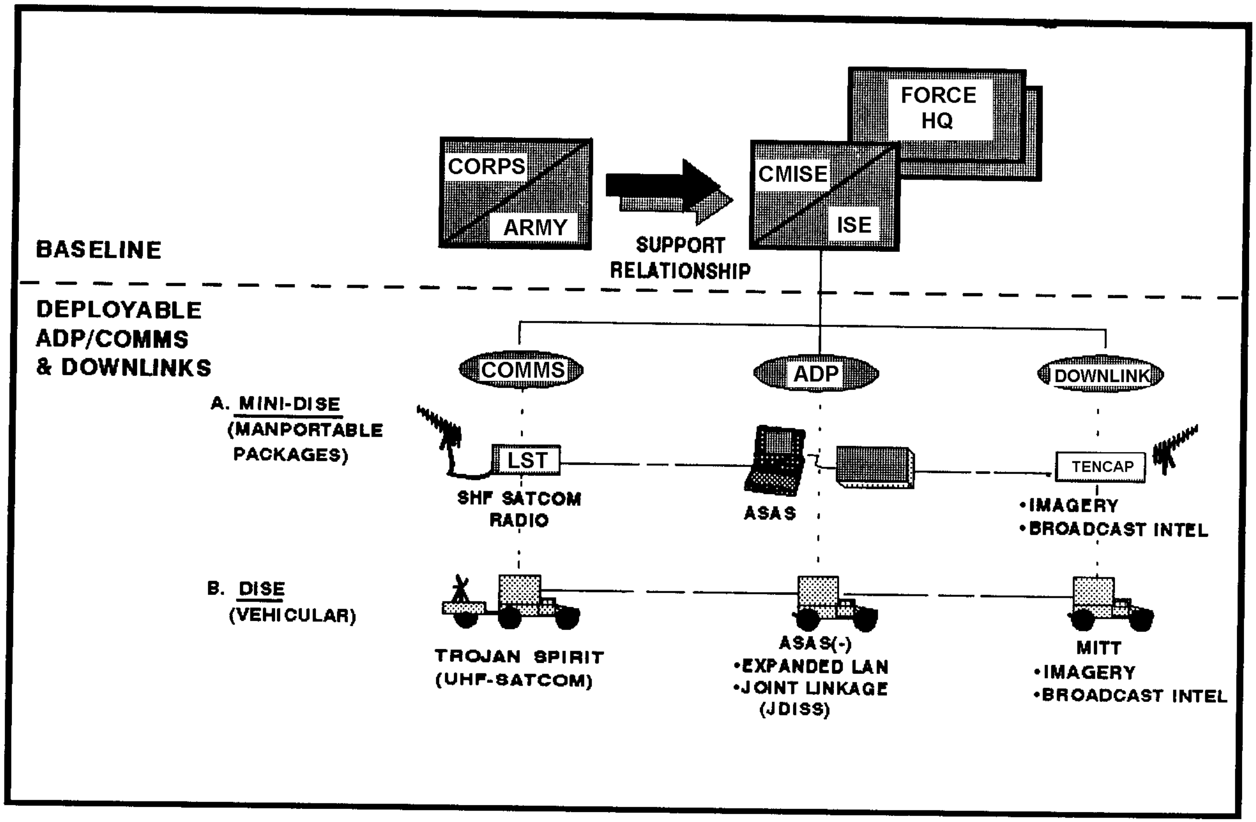

FORCE HQ
CORPS
ARMY
CMISE
ISE
SUPPORT RELATIONSHIP
BASELINE
DEPLOYABLE ADP/COMMS & DOWNLINKS
COMMS
ADP
DOWNLINK
A. MINI-DISE (MANPORTABLE PACKAGES)
LST
SHF SATCOM RADIO
ASAS
TENCAP
•IMAGERY
•BROADCAST INTEL
B. DISE (VEHICULAR)
TROJAN SPIRIT (UHF-SATCOM)
ASAS(-)
•EXPANDED LAN
•JOINT LINKAGE (JDISS)
MITT
•IMAGERY
•BROADCAST INTEL

Figure 3-2. Example of initial entry packages for force projection operations.

During deployment, intelligence organizations in the rear such as the CMISE and the ACE of the theater Ml brigade take advantage of modern satellite communications (SATCOM), broadcast technology, and automatic data processing (ADP) systems to provide graphic and textual intelligence updates to the forces enroute. Enroute updates help eliminate information voids and allow the commander to adjust OPORDs prior to arrival in theater.

Intelligence units extend established networks to connect intelligence staffs and collection assets at various stages of the deployment flow. Where necessary, new communications paths are established to meet unique demands of the mission. The theater ACE and the CMISE play a critical role in making communications paths, networks, and intelligence data bases available to deploying forces.

Space-based systems play an important part in supporting IEW during the deployment and the subsequent stages of force projection operations by—

- Providing communications links between forces enroute and in the CONUS.
- Providing l&W information from national intelligence systems and organizations.

- Permitting MI collection assets to accurately determine their position through the Global Positioning System (GPS).

- Providing timely and accurate weather information to all commanders through the Integrated Meteorological System (IMETS).

Entry Operations:

Force protection and situation development dominate IEW activities in this stage. Intelligence staffs attempt to identify all threats to arriving forces and assist the commander in developing force protection measures.

During initial entry operations, echelons above corps (EAC) organizations provide major intelligence support. This support includes providing access to departmental and joint intelligence, and deploying scalable EAC intelligence assets. The entire effort focuses downwardly to provide tailored support to deploying and deployed echelons in response to their commanders' PIR and IR.

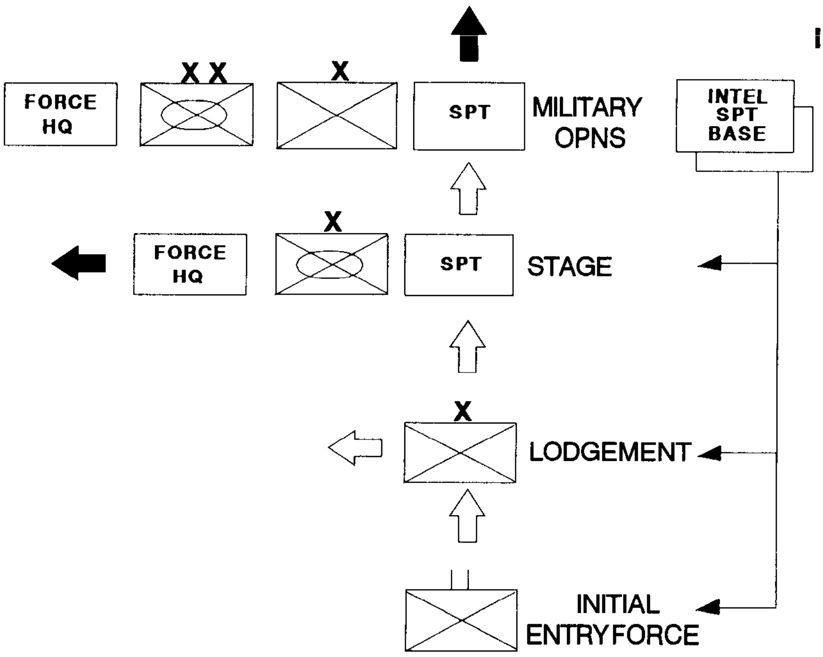
Collection and processing capabilities are enhanced as IEW assets build up in the deployment area. Particular attention is given to the buildup of the in-theater capability required to conduct sustained IEW operations. As the buildup continues, intelligence staffs strive to reduce total dependence on extended split-based "top-driven" intelligence from outside the AO. As organic IEW assets flow into the theater, intelligence staffs begin to rely on them for tactical intelligence although national and theater organization remain a source of tactical and operational intelligence. Figure 3-3 illustrates IEW tactical tailoring and imperatives.

Intelligence staffs provide the commander support in planning the composition and deployment of follow-on combat, CS, and CSS units. As AR FOR enter the theater of operations, the JTF J2 implements, and where necessary, modifies the theater intelligence architecture planned during predeployment.

Deploying intelligence assets establish liaison with staffs and units already present in the AO. Liaison personnel and basic communications should be in place prior to the scheduled arrival of parent commands. MI units establish intelligence communications networks to support combat commanders.

Coordinating staffs at all levels establish reporting and request procedures to ensure the timely receipt of intelligence.

CONUS and other secure intelligence support bases outside the AO continue to support deployed units. In a mature theater, as systems such as Joint STARS begin operating, units equipped with the Joint STARS ground station module (GSM) or the common ground station (CGS) will be able to receive downlink data in NRT tailored to each unit's area of operation.



INTELLIGENCE IMPERATIVES

- JOINT AND COMBINED INTELLIGENCE OPERATION
- "SKIP ECHELON" INTELLIGENCE SUPPORT...REACH OUT TO COMMANDER DOING THE WORK
- COMMON COMMUNICATIONS AND INTELLIGENCE PROCESSING CAPABILITY AT EVERY ECHELON
- "PULL" SYSTEM FOR INTELLIGENCE
- CRITICAL IMPORTANCE OF HUMINT

Figure 3-3. Force projection tactical tailoring.

Systems capable of rapid receipt and processing of intelligence from national systems and high capacity, long-haul communications systems are critical to the success of split-based support of a force projection operation. These systems can provide a continuous flow of intelligence, including annotated imagery products, to satisfy many operational needs. Examples of these type systems are the Imagery Processing and Dissemination System (IPDS), the Electronic Processing and Dissemination System (EPDS), TROJAN SPIRIT, and SUCCESS radio.

Intelligence staffs help plan friendly deception, deep attack, and other operations that create conditions for decisive operations. They also adjust collection activities to look deeper into the battle space as combat strength builds and begin to concentrate on situation and target development.

Operations:

With sufficient combat power and resources in place, the commander shifts his focus from IEW support for deployment to support required for sustained operations. At the beginning of the operations stage, intelligence reaches the crossover point where tactical intelligence becomes the commander's primary source of support, replacing top-driven national and theater intelligence. The commander uses both tactical and operational intelligence to decisively engage and defeat the enemy in combat operations. In OOTW, the commander may use all levels of intelligence to accomplish his mission.

During operations, intelligence staffs and units support the development and execution of plans by identifying threat centers of gravity and decisive points on the battlefield. The G2 (S2) ensures the collection management and synchronization processes focus on the commander's PIR. MI units continually evolve their concepts of employment to reflect changes in the operation.

Figure 3-4 provides an example of IEW support during this stage of force projection operations.

War Termination and Postconflict Operations:

Upon cessation of hostilities or truce, deployed forces enter a new stage of force projection operations. Postconflict operations focus on restoring order, reestablishing host nation infrastructure, preparing for redeployment of forces, and planning residual presence of US Forces. While postconflict operations strive to transition from war to peace, there remains a possibility of resurgent hostilities by individuals and forces. As during deployment, this stage and the next will place renewed emphasis on force protection.

During this stage, commanders redirect their PIR and IR to support units conducting restoration operations. These might include-

- Engineer units conducting mine clearing or infrastructure reconstruction operations.
- Medical and logistics units providing humanitarian relief.
- Military police units providing law and order assistance.

Collection management continues to support the commander's PIR. The nature of the PIR shifts from assessing threat forces to assessing political, economic, and other conditions that affect force protection and the desired end state.

Redeployment and Reconstitution:

As combat power and resources decrease in the AO, force protection and I&W become the focus of the commander's intelligence requirements. This in turn drives the selection of those MI units that must remain deployed and those which may redeploy.

Demobilization:

Demobilization is the stage where MI individuals and units return to premobilization posture or predeployment activities. MI units resume contingency-oriented peacetime IEW operations. RC MI units deactivate and return to peacetime activities.

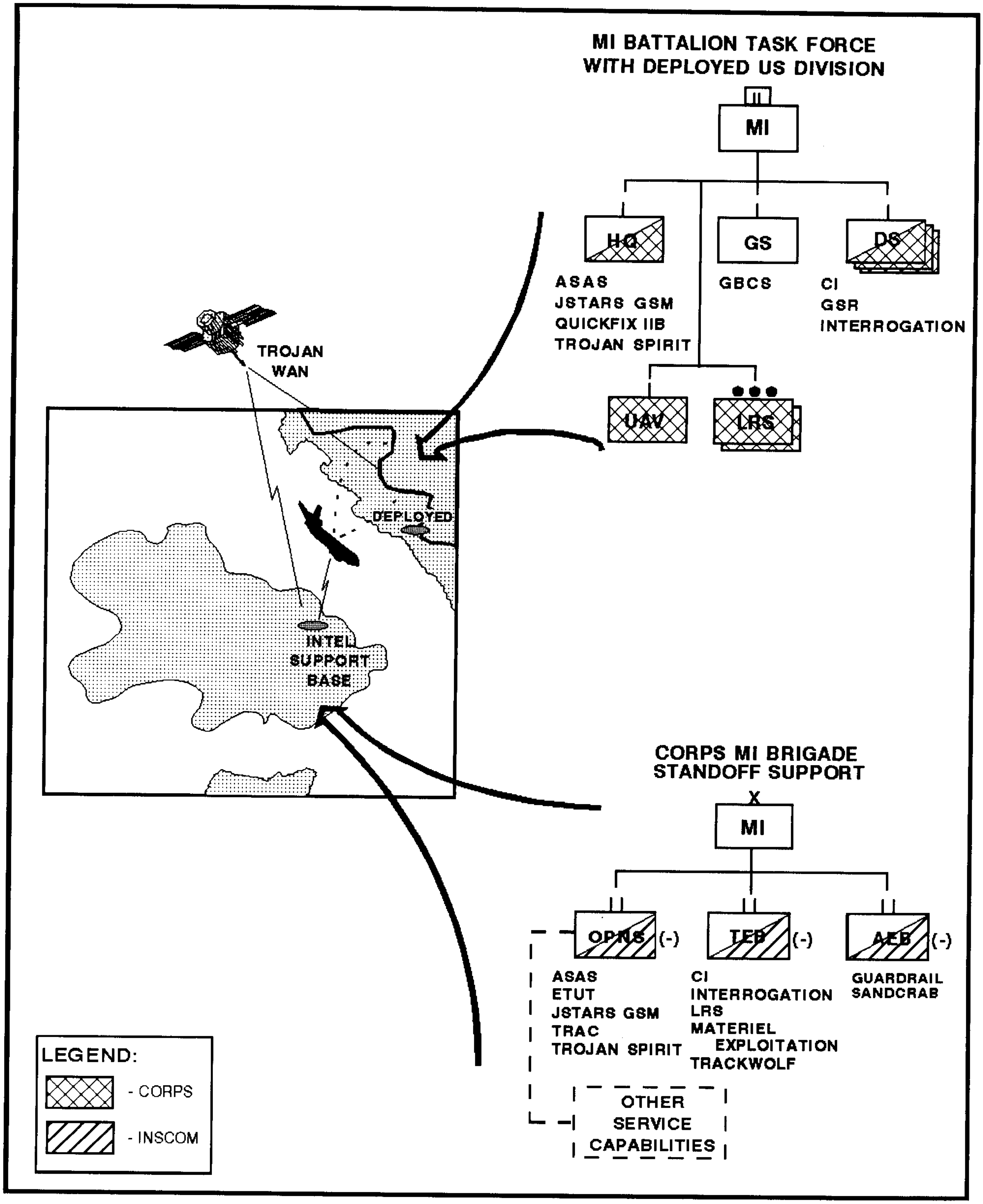

MI BATTALION TASK FORCE
WITH DEPLOYED US DIVISION
II
MI
HQ
GS
DS
ASAS
JSTARS GSM
QUICKFIX IIB
TROJAN SPIRIT
GBCS
CI
GSR
INTERROGATION
UAV
LRS
TROJAN
WAN
DEPLOYED
INTEL
SUPPORT
BASE
CORPS MI BRIGADE
STANDOFF SUPPORT
X
MI
II
OPNS (-)
TEB (-)
AEB (-)
ASAS
ETUT
JSTARS GSM
TRAC
TROJAN SPIRIT
CI
INTERROGATION
LRS
MATERIEL
EXPLOITATION
TRACKWOLF
GUARDRAIL
SANDCRAB
OTHER
SERVICE
CAPABILITIES
LEGEND:
- CORPS
- INSCOM

Figure 3-4. Example of IEW support to force projection operations.

CHAPTER 4

COMBAT OPERATIONS

Great advantage is drawn from knowledge of your adversary,, and when you know the measure of his intelligence and character, you can use it to play on his weaknesses.

—Fredrick the Great, 1747

IEW supports Army combat operations in war, conflict, and, when necessary OOTW. Combat operations may involve heavy, light, or special operations forces. They may be large-scale during war or small-scale in OOTW. Commanders may conduct combat operations anywhere in their AO as part of close, deep, or rear operations. MI units and resources support the commander in executing offensive, defensive, and retrograde operations.

IEW SUPPORTS COMMANDERS

Commanders use IEW support to anticipate the battle, understand the battlefield framework, and influence the outcome of operations. IEW enables commanders to focus and protect their combat power and resources. All commanders use IEW to support force protection. And, while IEW support is required for every situation, each application will be tailored to the commander's requirements at each echelon and for each operation.

Combat Commanders use IEW to plan and execute operations. These operations may be combat operations during war or OOTW. Intelligence helps the combat commander understand the AO, visualize his battle space, and construct the battlefield framework. Intelligence shows where the commander can apply combat power to exploit threat vulnerabilities or capitalize on opportunities with minimum risk.

Combat Support Commanders use IEW to plan, execute, and protect support operations. For example, before establishing a communications site, a signal unit requires specific information on the capabilities of the enemy to intercept, locate, identify, and target friendly communications sites. The signal unit uses MDCI to assess vulnerabilities and plan force protection measures. During operations, the unit uses EP to counter enemy C^2W.

Combat Service Support Commanders use IEW to identify the vulnerabilities of CSS sites and operations to enemy action, both in the forward area and rear area. In addition, CSS commanders use intelligence to anticipate friendly logistic requirements and locate routes and positions for logistic operations. As an example, indicators of an enemy attack might cue the use of rear area security forces or the forward positioning of medical evacuation assets.

Understanding and building the battlefield framework is enhanced by melding MI "electronic cavalry" with traditional reconnaissance. By melding the "top down" intelligence of MI with the "bottom up" combat information gathered by cavalry and other combat arms reconnaissance assets, the G2 (S2) can give commanders the information they need to visualize their battle space. Split-based operations further improve the commanders ability to understand and direct the battle by allowing them to receive reconnaissance and downwardly focused intelligence support during the battle while on the move. The linking of MI electronic cavalry with traditional reconnaissance, the ability to conduct split-based operations, and the availability of downwardly focused intelligence provide commanders the tools they need to win decisively on the battlefield. See Figure 4-1.

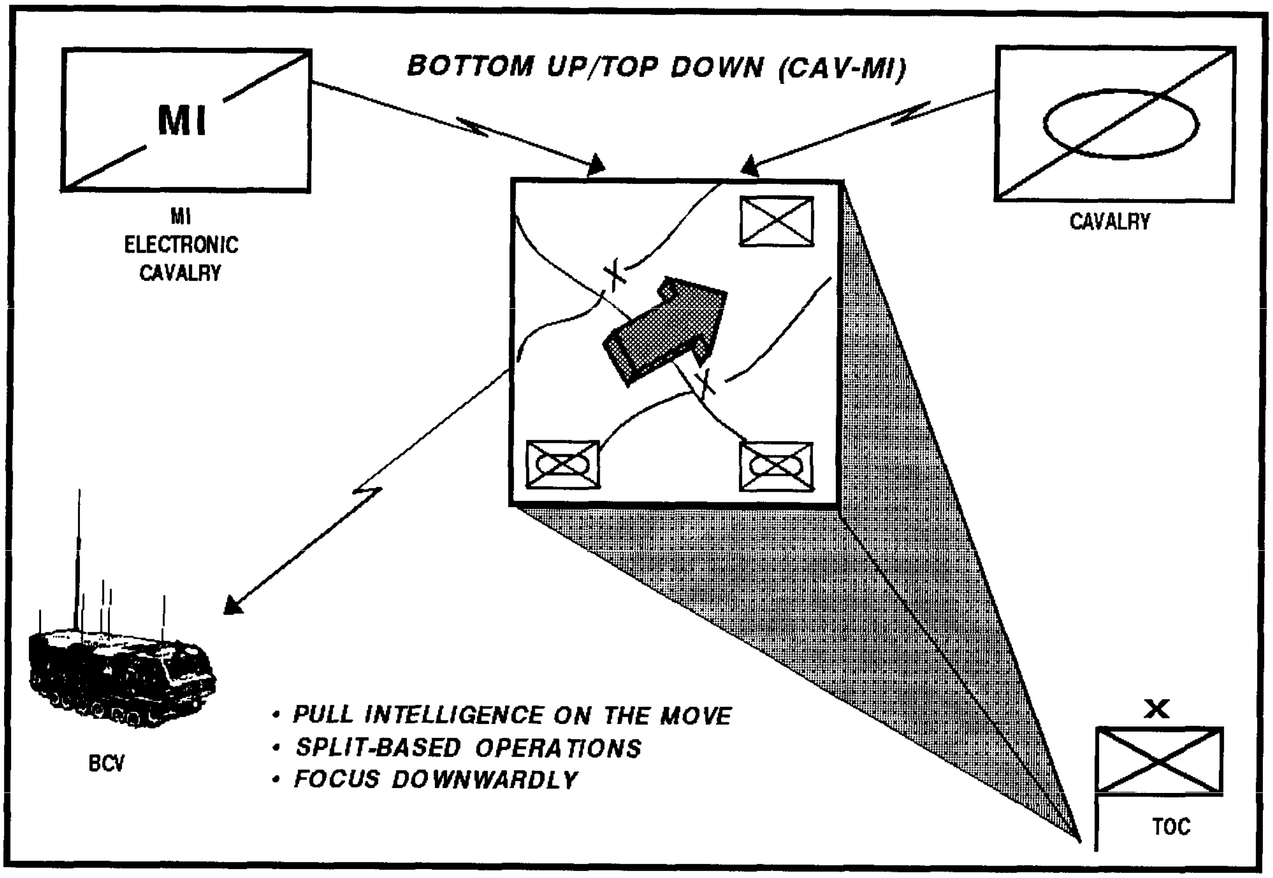

BOTTOM UP/TOP DOWN (CAV-MI)
MI
MI ELECTRONIC CAVALRY
CAVALRY
BCV
• PULL INTELLIGENCE ON THE MOVE
• SPLIT-BASED OPERATIONS
• FOCUS DOWNWARDLY
X
TOC

Figure 4-1. Melding electronic cavalry and traditional reconnaissance.

COOMMANDER'S INTELLIGENCE TEAM

The G2 (S2) and MI commander are a team whose mission is to provide IEW support to the commander. As a team, they are responsible to the commander for planning and directing the intelligence activities of the command. Together, they develop standards for IEW training and operations.

The G2 (S2) is the commander’s senior intelligence officer and primary staff officer for intelligence at Army service component-level through battalion. The G2 (S2) directs and supervises the commander’s intelligence and CI operations.

He ensures the commander is supported with timely intelligence, targets, and BDA. The G2 (S2) ensures that the intelligence needs of all staff elements are addressed and supported. He coordinates the employment of IEW assets with the G3 (S3) and the FSO to ensure full integration of EW with the Fire Support BOS. He prepares and issues SORs to supporting MI units. The G2 (S2) maintains close and continuous contact with IEW elements at higher echelons to ensure his commander's critical IEW needs are understood and acted upon. The G2 (S2) supervises the intelligence training of the unit and his staff.

The MI commander executes IEW operations using his organic and attached assets. He is responsible for providinq the commander with a trained and mission-ready IEW force. He develops MI leaders capable of leading small teams in OOTW, and companies or battalions in war. In war and OOTW, the MI commander is responsible for the C^2, maneuver, sustainment, and protection of his MI unit. The MI commander ensures his unit executes the G2 (S2) intelligence SOR and G3 (S3) EW SOR in concert with the concept of operation. The MI commander anticipates the IEW operational requirements of future operations.

RANGE OF MILITARY OPERATIONS

IEW supports commanders across the range of military operations. Military operations are categorized as **peacetime, conflict, and war.**

Peacetime:

During the first environment, peacetime, the Army serves as a deterrent to war and helps keep tensions between nations below the threshold of conflict. Examples of peacetime operations are disaster relief and nation assistance.

Conflict:

The second environment, conflict, is characterized by confrontation and hostilities short of war. Examples of conflict are peacekeeping, noncombatant evacuation operations (NEO), counterinsurgency, and support to insurgency.

The Army classifies its activities during peacetime and conflict as OOTW. In addition to traditional intelligence, these operations require intelligence that identifies political, social, economic, and demographic issues. These needs might be as diverse as the identification of weather conditions that might interfere with disaster relief operations, or locating drug processing centers as part of counter-drug operations.

War:

The third environment, that of war, is a state of armed conflict which involves large scale combat operations against a state or nation. Wars may be limited or general in scope. Operation Just Cause is an example of a limited war. A general war is one in which major powers mobilize all national resources in a struggle for survival or dominance. World War II is an example of a general war. War requires multidisciplined intelligence which gives the commander the information necessary to successfully plan and execute military operations.

IEW AND THE TENENTS OF ARMY OPERATIONS

The following describe IEW and the tenets of Army operations:

Initiative:

Initiative sets or changes the terms of battle by action and implies an offensive spirit in conduct of all operations. The commander uses the intelligence system to gain advance warning and to anticipate probable enemy COAs. With foreknowledge of the enemy's intent, the commander can act or react faster than the enemy, avoid or neutralize enemy strength, strike at enemy weaknesses, and take maximum advantage of opportunities.

Agility:

Agility enables the commander to act or react faster than the enemy and is a prerequisite for seizing and holding the initiative. The commander uses the intelligence system to see and understand the entire battlefield, predict enemy COAs and vulnerabilities, and anticipate changes in the operational environment. With this intelligence, the commander can quickly recognize decisive points, anticipate the enemy COA, and rapidly adjust his plan to exploit opportunities or enemy vulnerabilities.

Depth:

Depth is the extension of operations in time, space, resources, and purpose. The commander uses the intelligence system to see the battlefield in depth, anticipate situations, and plan future COAs. Armed with intelligence, the commander conducts or influences operations which attack the enemy simultaneously throughout the depth of the battlefield, and forces the enemy to fight on the commander's terms. With knowledge of the enemy's disposition, movement, and intent, the commander safeguards his freedom of action by protecting his forces and resources needed for sustained operations from enemy action.

Synchronization:

Synchronization is arranging activities in time and space to mass at the decisive point. The commander integrates the activities of the Intelligence B0S with other BOSs to gain overwhelming combat power at decisive times and places. Intelligence predicts where and when those decisive points will occur. It provides commanders what they want (intelligence and targets), when they want it (in time to influence the operation), in the format they requested (immediately usable), and in concert with their concept of operations.

Versatility:

Versatility enables units to meet diverse mission requirements. The commander employs the intelligence system to acquire intelligence about potential enemy forces and operational environments. With this intelligence, the commander can rapidly and effectively shift his focus, tailor his forces, and move from mission to mission across the full range of military operations.

BATTLEFIELD FRAMWORK

Commanders build the battlefield framework by establishing relationships between the AO, the battle space, and the battlefield organization. This section addresses each of these parts as they relate to IEW.

Area of Operations:

Commanders allocate AOs to subordinate units based on METT-T and the unit's capability. The G2 (S2) assists the commander in allocating areas by providing him with the best intelligence on possible AOs. He advises the commander on the availability of information on the AO, the ability of the IEW system to cover those areas, and the support needed from other parts of the intelligence system. The G2 (S2) also coordinates with the G3 (S3) on deploying organic and supporting Ml units within the AO.

By knowing the AO, commanders at every level can anticipate developments, prepare options, and exploit battlefield opportunities. They can attack or defend over advantageous terrain, seize key terrain, and exploit weaknesses in the enemy's use of terrain.

Battle Space:

The commander's battle space extends beyond the boundaries of the AO. The dimensions and content of the commander's battle space change as the operation progresses. Within the battle space, the commander must understand the physical environment in which his forces will operate; employ available resources to their fullest capability; and integrate joint or combined assets which can be used to engage the enemy. The commander must also have an appreciation for the ability of enemy forces within and outside his battle space to jeopardize his operations. Understanding the battle space allows the commander to plan, organize, and synchronize his operations and successfully protect his force while dominating the enemy within the battle space.

Area of Interest:

In the context of IEW operations, the AI is the AO, the battle space, and the regions beyond the battle space. IEW operations directed at the AI attempt to identify enemy forces or other potentially hostile forces outside the battle space which could jeopardize current or future operations. In force projection operations, the AI could include areas through which US Forces must transit to reach the AO. Coverage of the AI would probably exceed the capabilities of organic IEW assets; therefore, the G2 (S2) must plan support from higher echelon and national intelligence activities to cover the AI.

Battlefield Organization:

Three closely related sets of activities **(deep, close,** and **rear area**) characterize operations within the AO. IEW supports these activities simultaneously in the following manner:

Deep Operations. IEW supports deep operations by—

- Dedicating adequate acquisition systems to effectively support targeting, deep attack, and BDA.
- Planning EW support, especially requirements for joint EW support.
- Identifying uncommitted enemy reserve forces.
- Conducting MDCI operations to prevent the enemy from gaining knowledge of deep OPLANs and preparations.
- Identifying enemy logistics assets, support infrastructure, and critical nodes.
- Supporting suppression of enemy air defenses (SEAD).

Close Operations. IEW supports close operations by—

- Providing tactical intelligence on the disposition, strength, weaknesses, composition, and intent of the enemy in contact.
- Conducting multidiscipline operations that support targeting and BDA.
- Conducting EA that disrupts or denies the enemy's effective use of C^2 and fire support communications.
- Providing predictive intelligence which includes identifying probable COAs for uncommitted enemy forces.
- Supporting SEAD.

Rear Area Operations. IEW supports rear area operations by—

- Assisting in identifying, analyzing, and early warning of potential threats to the friendly rear area.
- Identifying terrain which supports friendly rear area operations,
- Using OPSEC and EP to protect C^2 centers and systems.

OFFENSIVE OPERATIONS

The main purpose of offensive operations is to defeat, destroy, or neutralize the enemy force. Successful offensive actions take the fight to the enemy in such a way as to achieve decisive victory at the least cost. Offensive operations at all levels require effective IEW support to help the commander avoid the enemy's main strength, and to deceive and surprise the enemy. IEW helps the commander decide when and where to concentrate sufficient combat power to overwhelm the enemy. At the tactical level, effective reconnaissance and counterreconnaissence are essential for the commander to preclude surprise from the enemy, maintain the initiative on the battlefield, and win the battle. Commanders at all levels synchronize intelligence and fires with their combat and CS systems to maximize their ability to see and strike the enemy simultaneously throughout the AO. IEW fundamentals apply to each basic form of offense.

Movement to Contact:

Movement to contact operations are conducted to develop the situation and to establish or regain contact. A movement to contact may take one of several forms: approach march; search and attack; reconnaissance in force; and meeting engagement. The extent and form of the operation depends on whether threat forces were previously in contact. Establishing and maintaining contact with the enemy is a central tenet of a movement to contact operation. The role of IEW in these operations is to ensure commanders have the intelligence they need to conduct mobile, force-oriented battles with minimum risk of surprise. For IEW operations, this means providing commanders with the enemy's locations, activities, and probable intentions with sufficient time to influence friendly operations. Traditional reconnaissance and security operations are a vital factor in finding and physically fixing the enemy. By effectively combining traditional reconnaissance and security operations with systems like the UAV and Joint STARS, IEW operations ensure commanders have the knowledge they need to execute movement to contact.

Attack:

The purpose of the attack is to defeat, destroy, or neutralize the enemy. The attack usually follows a movement to contact but is also used after defensive operations, exploitations, and pursuits. The commander must decide when to begin and end an attack based on its contribution to meeting his objectives. *Successful attacks* are preceded by *successful reconnaissance.* IEW operations help the commander identify the conditions needed to begin, conduct, and terminate an attack regardless of the type of attack.

Exploitation:

Exploitation is the extension of destruction of the defending force by maintaining offensive pressure. Such actions may include seizing objectives deep in the enemy rear, cutting LOC, isolating and destroying enemy units, and disrupting enemy C^2. Aggressive exploitation of enemy vulnerabilities can disintegrate and demoralize the enemy to the point where his only options are to surrender or withdraw. Commanders must be able to quickly recognize fleeting opportunities for exploitation or pursuit.

All of the attacking commander's information resources must immediately report indications of enemy vulnerabilities resulting from the initial attack. Increased enemy prisoners of war (EPWs), disintegration of enemy units after initial contact; disorganized defense, and capture or absence of enemy leaders are all indications of friendly opportunities to transition to exploitation.

IEW assets support the commander’s decision to exploit by identifying exposed flanks or any weakness in the enemy’s defense. They determine the enemy’s intentions to defend in place, to delay, or to withdraw to other defensive positions. IEW resources confirm destruction of enemy fighting and support capabilities. They identify and locate vulnerable targets in the enemy rear area, such as communications, supply, and maintenance centers. They locate and track enemy forces which could counter exploitation forces.

Pursuit:

The pursuit is an operation against a retreating force and follows a successful attack or exploitation. When the enemy can no longer resist and decides to withdraw, the commander may elect to pursue and destroy the enemy force. Although the commander may not always be able to anticipate pursuit, he should always include withdrawal and retreat among enemy COAs considered in planning and wargaming.

Any of the commander’s information resources can provide indications that the enemy force is abandoning its position and equipment, and retreating. The commander needs this information as fast as possible to transition from attack or exploitation to pursuit.

IEW assets continually report the enemy’s location, direction, and rate of movement. They locate and track HPTs and report targeting data to FSEs the enemy force reconstitutes its defense, IEW resources report the time, place, and type of defense. They report any attempt to counterattack, outflank, or cut off friendly forces which have driven deep into enemy territory.

DEEFENSIVE OPERATIONS

The immediate purpose of defensive operations is to defeat an enemy attack. Since only offensive operations can destroy the enemy and win the battle, the ultimate purpose of defensive operations is to create the opportunity to shift to the offense. In the defense, commanders may use any combination of combat operations at different times and places on the battlefield to defeat the enemy. Commanders defend to buy time, hold key terrain, hold the enemy in one place while attacking in another, or destroy enemy combat power while reinforcing friendly forces. IEW fundamentals apply to both primary forms of defensive operations and to defense in depth.

Mobile Defense:

A mobile defense employs a combination of fire and maneuver, offense, defense, and delay to destroy the enemy and defeat his attack. Commanders employing a mobile defense attempt to get the most from terrain and obstacles while employing fire and maneuver to take the initiative from the attacking enemy. IEW supports the commander in gaining the initiative by identifying key terrain and potential enemy avenues of approach; tracking the enemy throughout his attack; supporting the targeting of the enemy’s critical nodes and fire support assets; and aiding in the neutralization of enemy reconnaissance through deception and EW. Most importantly, intelligence helps the commander identify the place and time when the enemy is most vulnerable to a decisive counterattack by the friendly mobile striking force. IEW should determine the enemy’s strength, intent, main avenue of approach, and location of his follow-on forces. The defending commander can then decide where to arrange his forces in an economy of force role to defend, yet still shape the battlefield. This will afford him the time necessary to commit the striking force precisely.

Area Defense:

An area defense focuses on denying the enemy access to designated terrain for a specified period of time, rather than on the outright destruction of the enemy. The commander conducts area defense by using a series of mutually supported positions in depth. IEW support in area defense identifies, locates, and tracks the enemy’s main attack and provides the commander time to allocate sufficient combat power to strengthen the defense at the point of the enemy’s main effort. Intelligence should also identify where and when the commander can most decisively counterattack the enemy’s main effort or exploit enemy vulnerabilities.

Defense in Depth:

In the defense as well as in the offense, operations in depth are the basis for success. Simultaneous application of combat power throughout the depth of the battle space defeats the enemy rapidly with minimum friendly casualties. Commanders conducting combat operations in depth require IEW support for deep, close, and rear operations.

Deep Operations. MI units provide early warning of enemy approach. They find, track, and target enemy forces enabling the commander to attack them effectively at long range. Corps and division aerial resources, LRSUs, theater, other services, and national systems provide information needed for deep operations. The primary tasks of deep IEW are to identify the enemy’s main effort and support target development. Deep collection operations locate such HPTs as enemy second and follow-on echelons, critical C^2 nodes, reconnaissance elements, FSEs, and logistics trains.

Close Operations. Close operations are the activities of the main and supporting efforts in the defensive area to slow, canalize, and defeat the enemy’s major units. The success of close operations depends on aggressive maneuver and counterattack as well as successful defense of key positions. As the enemy attack begins, the commander’s first concerns are to identify the enemy’s committed units and direction of attack, and gain time to react. The first sources of this information will be reconnaissance and security forces, MI units, SOF, and air elements conducting deep operations. Commanders rely heavily on combat information for immediate reports of enemy activities and vulnerabilities. Combat information from units in contact supports friendly fire and maneuver to attack exposed HPTs and vulnerable enemy units.

IEW resources concentrate on tracking enemy units, providing early warning of threats against exposed flanks, gaps in defensive positions, or any attempt to outmaneuver the defending force. IEW identifies and targets HPTs, supports OPSEC and deception, and conducts EA coordinated with planned fire and maneuver.

Close IEW strives to identify the enemy's intentions and main effort as early as possible to support the commander's battle planning. The commander ensures that the G2 (S2) collection strategy supports the PIR and IR developed for the operation.

Rear Operations. Rear operations sustain friendly, close, and deep combat operations. Successful defense in friendly rear areas prevents disruption of C^2, fire support, logistics, and movement of reserves. The threat to rear operations includes all enemy deep battle forces: conventional ground, air, and missile forces; unconventional forces; enemy agents; and sympathizers.

The keys to rear area defense are sound planning, early warning, continuous OPSEC, and immediate deployment of sufficient forces and resources to counter any threat.

Detection of the enemy is the responsibility of every soldier in the command and all intelligence collectors at every echelon. The operations and intelligence section of the RAOC coordinates intelligence preparation for rear operations. The RAOC recommends intelligence requirements to the G2 (S2) for consolidation into the unit's PIR and IR. The RAOC also requests intelligence collection, MDCI, and CA support for rear operations. MDCI personnel and interrogators provide HUMINT to identify and help neutralize enemy agents, sympathizers, and unconventional forces in the rear area.

Other IEW assets may, on order, redirect their efforts from deep and close operations to support combat operations against a rear area threat from conventional forces. The corps depends on EAC and national systems for early warning and intelligence on threats from beyond the corps' AO, such as an attack by enemy airborne forces.

RETROGRADE OPERATIONS

Retrograde operations are maneuvers to the rear or away from the enemy. The purpose of a retrograde operation is to improve the situation for the friendly force, draw the enemy into an unfavorable position, regain the initiative, and defeat the enemy. Units conducting retrograde operations conceal the movement of the main force and avoid decisive engagements. IEW supports all retrograde operations by tracking the disposition of the enemy force and denying the enemy intelligence on movement of the friendly force. Retrograde operations are more effective when deception and OPSEC confuse the enemy about the true disposition of the friendly force. There are three types of retrograde **operations—delays, withdrawals,** and **retirements.**

Delays. In delays, the commander yields ground to gain time, retain freedom of action, and inflict the greatest possible damage on the enemy, IEW support concentrates on measures that obscure the size and intent of the delaying force and create the element of surprise, Each time the enemy commander is engaged by the delaying force, he must be convinced through the application of combat power, deception, and OPSEC that he has engaged the main force. This causes the enemy commander to stop, deploy his forces, and prepare to attack or defend. The delaying force then disengages and withdraws to the next delay position.

Withdrawals. Commanders conduct withdrawals to avoid combat under undesirable conditions, preserve the force, adjust defensive positions, or relocate the entire force. In all withdrawals, the commander attempts to deceive the enemy. Some friendly elements remain in contact and simulate activity of the larger unit, including electronic activity, to mask the withdrawal from enemy intelligence. MDCI teams monitor the simulative deception based on OPSEC evaluation of normal friendly force signatures, patterns, and profiles.

Retirements. Retirements are rearward movements conducted by units not in contact with the enemy. The commander retires his force to shorten LOC, remove the force from the area of combat, or reposition the force to permit its use elsewhere. IEW support includes determining routes and favorable terrain for the retirement; identifying enemy forces which could interdict the movement; and denying the enemy knowledge of the operation.

MILITARY INTELLIGENCE UNITS

MI units are organized to support a wide range of possible missions. The doctrinal principles for the C^2 and employment of MI units are similar to those used by non-MI units (for example, field artillery [FA] or engineer units). FM 101-5 discusses the doctrinal principles and TTPs on how to command and control units. This section briefly discusses the C^2 and employment considerations of MI units.

Tailoring the Force:

When the commander receives a mission, he considers METT-T and the capability of his assets in tailoring the force to optimize IEW support. To ensure continuous and responsive IEW support, he establishes early the C^2 structure and means required to effectively C^2 IEW assets. The commander also—

- Designates the command relationship of subordinate units. (Options include assigned, attached, or operational control [OPCON].)
- Designates the support relationship of subordinate units. (Options include direct support [DS], general support [GS], reinforcing [R], and general support-reinforcing [GS-R].) These are also called standard tactical missions.

An example of a support relationship is the DS MI company habitually associated with a maneuver brigade. The mission of the company commander is to support the maneuver brigade commander. However, the company commander retains the authority to organize his unit as he judges to accomplish the mission. At the same time, the MI battalion commander helps the company commander support the maneuver brigade commander (much like the division artillery [DIVARTY] commander helps the DS FA battalion commander support the maneuver commander). FM 101-5 contains additional information on command and support relationships.

Planning IEW Support:

When the MI commander receives a mission, he conducts the decision making process like any other unit commander. The SORs become the specified tasks that drive mission analysis. Implied tasks will include the maneuver and support of subordinate MI units so that they can accomplish the specified tasks.

The MI commander’s concept of operation revolves around the organization, deployment, allocation, and employment of subordinate MI units necessary to accomplish the IEW requirements throughout the mission. To satisfy his collection or EW mission, he will forward deploy systems into air or groundspace owned by other units. This requires coordination with forward maneuver units.

Executing IEW Support:

During execution, the MI commander follows the supported commander’s operation and attempts to anticipate IEW tasks required to sustain the operation or execute subsequent COAs. He ensures MI units in GS accomplish assigned tasks and continues to provide DS MI unit commanders with intelligence and logistics support. The following tasks assist the MI commander in successfully executing his unit’s IEW mission:

Track the battle. The MI unit continually monitors the progress of the supported unit and satisfaction of tasks directed in the SOR, the collection plan, and the intelligence synchronization matrix. This enables the MI commander to anticipate rapidly changing priorities and deadlines for IEW support.

- Know MI unit status. The MI commander must know the status of IEW personnel and systems at all times. He must ensure that collection managers also know the status of all collection assets under his control. Timely, accurate status reporting enables the commander and his staff to monitor the execution of collection plans and make adjustments, when necessary, to ensure synchronization with the operation.

- Coordinate employment of MI units. A maneuver unit generally owns the ground- or airspace for each collection location. The MI commander coordinates movement and use of space to minimize the possibility of fratricide and risks from enemy action.

- Reference all reporting to original SOR. The MI unit annotates reporting with the SORs it supports.

Because of the dynamics of combat, the MI commander may frequently have to reposition and redirect the employment of his assets. Sometimes he must adjust forward asset locations to ensure protection by friendly maneuver forces. To sustain this protection, the MI unit commander must know when the maneuver unit withdraws or moves forward and have a well-rehearsed plan to conduct a complementary move.

Survivability of IEW assets is essential in any type of operation. Consistent with security and communications requirements and mission responsiveness, IEW assets should disperse to the maximum extent possible and apply all possible OPSEC measures.

FMs 34-10, 34-25, 34-37, and 34-80 discuss TTPs for the organization of intelligence assets at brigade, division, corps, and theater.

Sustaining MI Units:

Sustaining MI units is similar to logistics required for other combat support units operating at the operational and tactical levels. However, MI units are distinctive in that they are equipped with some low-density and classified IEW systems requiring specialized maintenance and components. A sustainment challenge for MI unit commanders is to provide logistics support to subordinate units which are widely dispersed in the AO but are not attached to the maneuver unit in whose area they are operating. For example, some low-density IEW systems can only be serviced by contractors. To maintain these systems, MI unit commanders must establish some mixture of equipment evacuation and forward deployment of civilians.

Sustaining combat effectiveness of MI units requires commanders and staffs to follow the five logistic imperatives addressed in FM 100-5 and FM 100-10. These imperatives are discussed below:

Anticipate. Commanders and staffs must anticipate IEW logistics requirements before and during operations.

Integrate. Commanders and staffs must integrate IEW logistics requirements and support concepts into strategic, operational, and tactical plans.

Continuous. Through planning, commanders and staffs must ensure continuity of support during operations and reduce the possibility of diminished combat effectiveness through lapses in support, particularly IEW system maintenance.

Responsive. Commanders must be supported by a responsive logistics operation capable of reacting rapidly to unforeseen situations.

Improvise. Commanders and staffs must be able to improvise logistics solutions to unforeseen situations that mean the difference between success and failure of IEW support to the operation.

Currently, IEW equipment maintenance is performed within the four-tiered system—unit, DS, GS, and depot. Due to the transformation from a forward deployed Army to a force projection Army, MI is moving towards the two-tiered system—field and sustainment with the rest of the Army. Unit and DS are under the field tier. The sustainment tier includes GS and higher. The goal is rapid repair as far forward as tactically feasible. Due to low-density and different generations, of IEW equipment in the field, the transition from four to two tiers will not occur at the same rate for each type of equipment.

Commanders and logistics personnel must contend with the following problems that, in some ways, are peculiar to IEW equipment.

- Beyond the year 2010, MI will conduct operations using equipment that essentially covers three generations of technology. The IEW logistics manager must be able to support all of these equipment variants as they exist in the inventory. Failing this, certain items must be identified as nonsupportable and be removed from the inventory so that scarce resources will not be diverted to nonproductive ends.

- The small number of most IEW systems make their procurement, replacement, and repair expensive when compared to other items such as wheeled vehicles, where economies of scale can be realized. Consequently, IEW logistics planners must ensure that adequate funding exists to support and field equipment at all levels.

- Combined with low-density, the per unit cost to repair parts and components for IEW equipment is higher than the cost for items purchased in greater numbers, regardless of complexity. This lends urgency to the requirement to thoroughly manage both end items and support packages from strategic to tactical levels of logistics.

- For some IEW systems, technical competence to repair or replace may only exist at the original equipment manufacturer (OEM) level. As the levels of technology continue to rise, more IEW equipment will be nonrepairable or even nondiagnosable at the unit or perhaps anywhere below the OEM level. This will lead to throw-away equipment, direct exchange with the manufacturer, or salvaging by repairing parts from the repair prescribed load list (PLL).

- Adherence to normal Army logistics systems and procedures may not always be possible.

PROCESSING AND DISSEMINATING INTELLIGENCE

Commanders and G2s (S2s) must thoroughly plan the intelligence processing and dissemination structure required to support military operations. Communications and ADP equipment connectivity, capacity, and redundancy must be in place at the beginning of each operation to ensure seamless muitiecheloned intelligence support from national intelligence centers down to the combat commander in the field.

The intelligence networks, planned and used in peacetime, should be similar to, if not the same as, those used during military operations. Communications and ADP used by MI units to process and disseminate intelligence in garrison, should also be used by these units when they deploy. Once established in the AO, communications and ADP capabilities, connectivities, and interfaces must remain flexible enough to adjust to changing operational requirements.

Processing and Disseminating Capabilities:

Systems such as the ASAS and TROJAN SPIRIT represent major leaps in MI's ability to process and disseminate intelligence. These and other systems like them provide the commander and G2 (S2) with the ability to—

- Receive and transmit digital imagery, templates, graphics, terrain products, and bulk data bases.
- Conduct split-based operations simultaneously between CONUS, outside continental United States (OCONUS), and deployed forces.
- Access and pull intelligence from worldwide multiechelon data bases at national, theater, corps, and division from deployed MI units.
- Receive direct broadcast dissemination of intelligence and targeting data.
- Collate, analyze, and synthesize information into intelligence products tailored to the echelon.

Echelon Connectivity:

Connectivity for intelligence interfaces between echelons must be planned and maintained continuously to ensure the commander receives timely and responsive intelligence support throughout the operation. Critical intelligence products must be capable of uninterrupted flow from national to deployed units.

This connectivity is achieved by linking existing communications networks such as the Defense Secure Network 3 (DSNET3) with the organic and special purpose systems of the deployed force. Special purpose systems like TROJAN SPIRIT and TENCAP require early planning to ensure connectivity and access to national intelligence support networks and systems. Gateways and protocols for exchanging information between and among all intelligence systems must be planned early and exercised in garrison to ensure successful operations.

INSCOM plays a valuable role in providing connectivity and gaining access to national systems and organizations.

Automation in Analysis and Synthesis:

Intelligence and communications systems can easily overwhelm a CP with information. The G2 (S2) establishes electronic and human "pertinence filters" to weed out irrelevant information. He must also take advantage of the computers ability to establish a relational data base of messages. This will enable analysts to access all information that falls within the specified location, time, and subject parameters. In collection management, relational data bases and automated journals allow complete and thorough cross-indexing, solving many of the problems collection managers often experience in relating requirements to reports, and tracking dissemination. He must also plan and train for operations without computer support due to power or system failure.

ELECTRONIC WARFARE PLANNING

EW planning is crucial to the success of C^2W operations. The effectiveness of EW operations depends upon the degree to which they are integrated with the commander's scheme of fire and maneuver. Systematic planning and full understanding of employment factors are critical to achieving full integration.

Effective EA requires timely intelligence and must be synchronized with critical events. The desired result determines the method of EA. This is especially important since many IEW systems can identify targets to the accuracy required by lethal fire systems. The thought should be, "Why jam when I can kill?" If the decision is to use nonlethal EA, then use it to maximize enemy confusion and minimize the loss of continuity on ES exploitable targets. If lethal fire is used, then coordinate support actions with the appropriate staff personnel. Regardless of which type of EA is used, it must be part of a well-coordinated action.

The tools that allow for effective EA and EP are the EW estimate and the EW annex. The estimate is prepared by the G3 staff and EWO based on the commander's guidance. It is coordinated with the MDCI analysis section which has the responsibility for assessing enemy intelligence capabilities. The EW estimate is a logical presentation of enemy and friendly EW capabilities as they relate to a given mission. It includes EW options available to the commander and weighs the relative merits of each.

The EW annex contains the details of EW mission, concept, and tasks to be performed by elements of the force. It describes how EW is used to support the operation. The G3, with input from the G2, EWO, and signal officer, prepares the EW annex in the 5-paragraph OPORD format. Amplifying details are covered in appendixes to the annex. For example, separate annexes for electronic deception, signal, and EP may exist. FM 34-40(S) provides samples of EW estimates and annexes.

The G3, G2, EWO, and FSO continually assess the effectiveness of EW operations. Assessment is crucial to the EW process. It identifies strength and weaknessses in current EW operations and provides a base of knowledge for planning and executing future operations. Assessment is conducted at each step of the EW process to ensure that EW operations are responsive to the commander's needs.

IEW SUPPORT IN SPECIAL ENVIRONMENTS

The following describe some operational and sustainment considerations of IEW operations in special environments:

Desert:

Desert operations involve rapid movement of troops, good observation, long fields of fire, mandatory use of deception, and a lack of what might normally be considered key terrain. Consider the following when planning IEW operations in a desert environment:

- **Operational.** Desert expanses necessitate wide dispersal of Ml units and IEW systems. The desert climate causes some degradation in amplitude modulation (AM) and frequency modulation (FM) radio communications due to thermal heating and dead spots. IMINT systems may be subject to heat-wave distortion. The collection capability of SIGINT systems may also be reduced by seasonal atmospheric conditions.

  MI units must consider how to employ IEW assets during rapid movement of maneuver forces across desert terrain. Stopping and establishing a collection site may cause the MI unit to fall behind the supported unit and quickly place it out of range of the enemy targets. Staying with the maneuver force will prevent collection operations and limit access to high capacity intelligence communications systems. For MI aviation assets, blowing sand and high winds may prevent or limit airborne collection operations which could keep pace with rapidly moving forces.

- **Sustainment.** Wind-blown dust and sand are responsible for increased wear and tear on equipment and, therefore, increasing maintenance and supply requirements. Operator maintenance of equipment is required continuously to keep sand and dust out of the equipment.

FM 90-3 contains additional information on desert operations.

Jungle:

Jungle operations are affected primarily by climate and vegetation. Both factors constrain IEW operations and sustainment capabilities. Consider the following when planning IEW operations in a jungle environment:

- **Operational.** Ground mobility restrictions require that IEW systems be lighter, manportable, and rugged. The same restrictions can increase reliance on helicopters for transport and IEW operations. IMINT systems will be degraded by jungle terrain. The dense vegetation, cloud cover, and precipitation will conceal targets. Some radar systems may be unable to penetrate the jungle depending on the density of vegetation and type of system used.

- **Sustainment.** Jungle operations require increased daily operator maintenance of equipment due to a high incidence of rust, corrosion, and fungus caused by high jungle moisture. Troop health hazards—including gastrointestinal disease, immersion foot, and fungus infection—are prevalent. Reliance on helicopter mobility for supplies is increased.

FM 90-5 contains additional information on jungle operations.

Mountain:

Mountain operations are characterized by reduced ranges for direct fire weapons, increased importance of indirect fire, canalized mobility along valley floors, decentralized combat, increased collection operations from heights dominating LOCs, and reduced C^2 capabilities. Consider the following when planning IEW operations in mountainous terrain:

- **Operational.** Use IEW systems that are light, rugged, and portable to exploit the advantages of higher terrain. Irregular terrain patterns create dead space which reduces the effectiveness of EW and degrades C^2. Use the mountain heights for observation posts to reduce the effect of terrain masking.

- **Sustainment.** The key to sustainment in mountain environments is training. The increased altitudes in mountain combat will affect a soldier's mental alertness, cause dehydration and sickness, and increase fear of heights.

FM 90-6 contains additional information on mountain operations.

Urban:

Military operations in urban terrain are characterized by shorter engagement ranges, structural obstructions to visual and electronic line of sight (LOS), and the addition of a new vertical dimension provided by subterranean structures such as sewers and buildings. Consider the following when planning IEW operations in an urban environment:

- **Operational.** The nature of urban combat may necessitate decentralized operations. MI units are normally placed in DS of, or attached to, maneuver units assigned urban operations. DF operations are impeded because signals reflect off structures. The urban environment restricts the effectiveness of AM and FM communications. Whenever possible, consider using wire and operational civilian telephone systems. Urban operations also increase the requirement for linguists in non-English speaking countries due to the increased interaction with the indigenous population.

- **Sustainment.** There are no unique sustainment considerations for IEW equipment, supplies, and MI soldiers in an urban environment.

FM 90-10 contains additional information on urban operations.

Nuclear, Chemical, Biological:

The capability and willingness of a growing number of nations to employ NBC weapons makes it urgent that US Forces plan to fight in an NBC environment. US Forces cannot allow enemy surprise or first use of NBC weapons to decide the outcome of the conflict. The employment of these weapons drastically alters the traditional concept of fire and maneuver. Their use can rapidly and effectively decide the outcome of the battle.

Consider the following when planning IEW operations in an NBC environment:

- **Operational.** MI operational objectives are to survive and continue IEW operations in an NBC environment. Achieving those objectives require that MI leaders and soldiers fully understand the NBC weapons and the vulnerabilities of IEW systems. It also requires that individual soldiers and teams be well-trained and prepared to operate with minimal mission degradation. Prestrike actions include OPSEC measures which help a unit avoid becoming a target.

- **Sustainment.** When NBC weapons are used, catastrophic losses may occur in seconds or minutes. Regeneration of combat power must be initiated immediately. The commander will have an immediate need for intelligence on which to base tactical decisions and force reconstitution. With the havoc that can be created by NBC weapons, MI units must recover rapidly for their own survival as well as that of the combined arms team.

FM 3-100 contains additional information on nuclear, biological, chemical operations.

Cold Weather:

Winter conditions have a significant effect on IEW operations due to brittleness of antennas, ice and fog on optic sights, and ice loading on antennas and intake filters. Consider the following when planning IEW operations in a cold weather environment:

- **Operational.** MI units operating in a cold weather environment should be afforded a higher than normal density of IEW systems due to severe terrain and climate conditions. Consider requirements for increased setup time to stabilize temperature and humidity so signal equipment will not fail.

- **Sustainment.** Units preparing for cold weather operations require larger than normal PLLs and authorized stockage lists (ASLs). Higher PLL usage should be expected for hoses, lubricants, filters, spark plugs, and all types of seals. For soldiers, there is greater susceptibility for frostbite, trench foot, and the effects of vision whiteouts and high windchill factors.

FMs 31-70, 31-71, and 34-81 contain additional information on cold weather operations.

CHAPTER 5

JOINT, COMBINED, AND INTERAGENCY OPERATIONS

> *Joint intelligence is rapidly evolving into a "pull down" system . . .*
> *When the JTF pulls, the strings reach to the top.*
>
> —Joint Pub 2-01, 12 October 1993

The Army conducts operations in concert and cooperation with other services, allied or coalition forces, agencies of the US Government at all levels, nongovernment agencies, and international agencies. Uncertainty about potential threats to the US and the requirements of force projection make almost any combination possible. Joint and combined operations are the primary means of conducting force projection operations and warfighting. In OOTW, Army operations will likely involve support to a civilian agency and some form of direction or control of the operation by that agency. The Intelligence BOS supports all such operations. Effective IEW in joint, combined, or interagency operations demands mutual intelligence support, sharing of IEW capabilities and assets, robust liaison, and agreement on policies and procedures among all participants.

JOINT OPERATIONS

Force projection is, by nature, a joint operation. In joint operations, Army MI units support the ARFOR and JTF commander. Army intelligence resources and capabilities are fully integrated and linked to the combatant command or JTF J2 and JIC. Within the joint intelligence organizations, Army MI personnel provide expertise on threat ground forces and the IEW needs of Army commanders.

Joint Intelligence Organizations:

Army IEW operations in joint operations focus on providing multidiscipline IEW support to the combatant command, the Army service component command and ARFOR, and the JTF. They build upon the foundation of joint intelligence developed during peacetime operations. Support to joint operations, therefore, should not require significant modification to the Intelligence BOS nor change the IEW principles of force projection. It does, however, demand greater awareness of the organizations, procedures, capabilities, and limitations of the Air Force, Navy, and Marine Corps IEW operations. And, for personnel working in a J2, JIC, or other joint intelligence organization, it means applying joint procedures and principles. The goal of Army IEW operations remains the same whether conducted in a joint or Army-only operational environment. That goal being a seamless system capable of meeting the IEW and targeting needs of the commander.

Joint intelligence organizations allow ARFOR commanders to build a continuous bridge from the deployed AR FOR to the JIC and beyond to national agencies. Figure 5-1 shows the joint intelligence architecture.

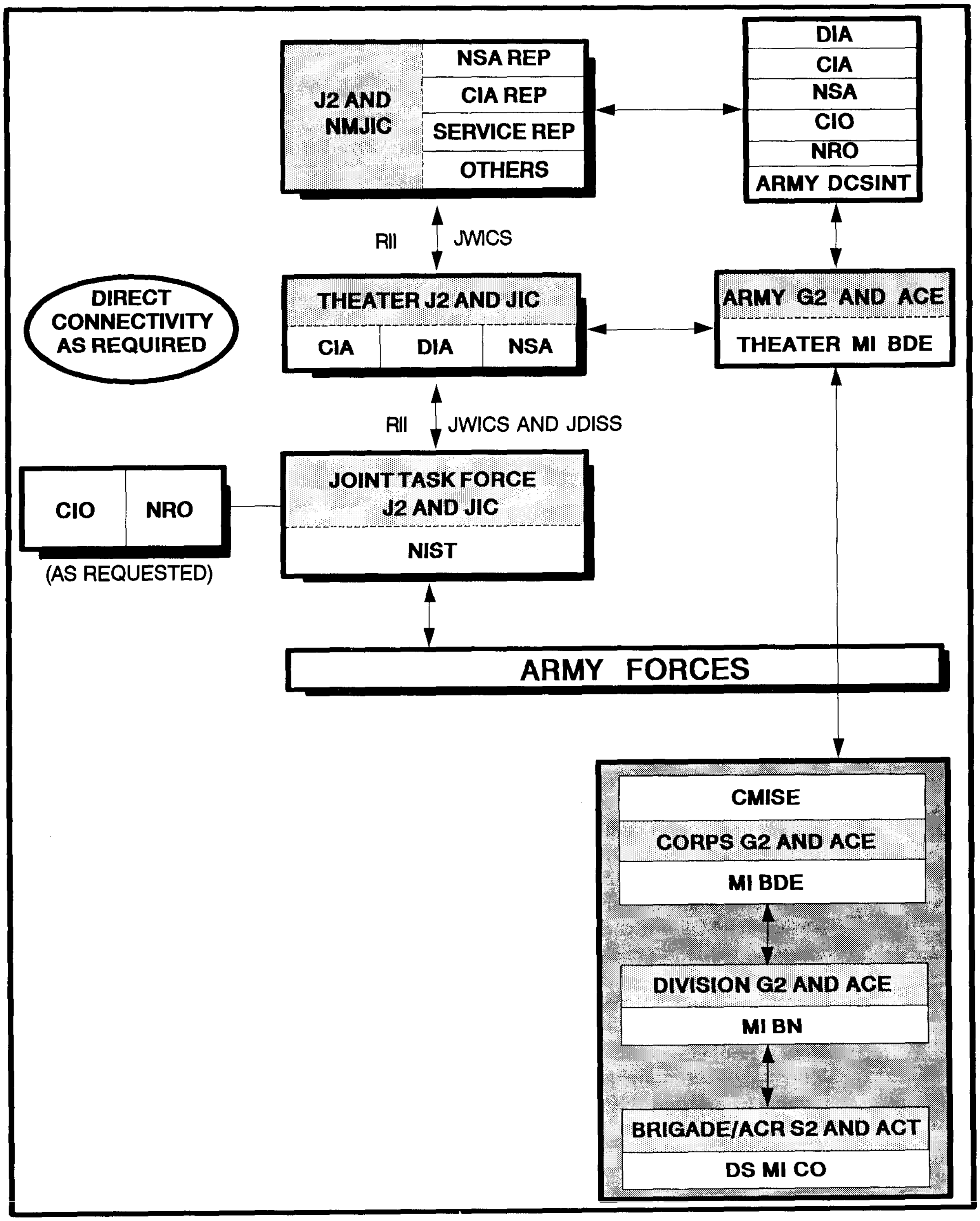

J2 AND NMJIC
NSA REP
CIA REP
SERVICE REP
OTHERS
DIA
CIA
NSA
CIO
NRO
ARMY DCSINT
RII
JWICS
DIRECT CONNECTIVITY AS REQUIRED
THEATER J2 AND JIC
CIA
DIA
NSA
ARMY G2 AND ACE
THEATER MI BDE
RII
JWICS AND JDISS
CIO
NRO
(AS REQUESTED)
JOINT TASK FORCE J2 AND JIC
NIST
ARMY FORCES
CMISE
CORPS G2 AND ACE
MI BDE
DIVISION G2 AND ACE
MI BN
BRIGADE/ACR S2 AND ACT
DS MI CO

Figure 5-1. Formal joint intelligence architecture.

Described below are some of the intelligence relationships which support joint intelligence operations.

National Security Council (NSC). The NSC advises the President and national leadership on integration of domestic, foreign, and military policies relating to national security. Statutory members of the NSC are the President, the Vice President, the Secretary of State, and the Secretary of Defense. The Director, Central Intelligence and Chairman, Joint Chiefs of Staff (CJCS) participate as advisors. The NSC provides review of, guidance for, and direction to the conduct of all national foreign intelligence and CI activities.

Director, Central Intelligence (DCI). The DCI coordinates the efforts of the intelligence community at the national level. As the DCI and head of the Central Intelligence Agency (CIA), he is the primary advisor to the President and the NSC cm national foreign intelligence matters. The DCI and the intelligence community staff provide guidance and direction to all intelligence agencies and organizations at the national and departmental level.

Joint Staff Director for Intelligence, J2 (Joint Staff J2). The Joint Staff J2 is the senior intelligence officer to the CJCS. As the Joint Staff J2, he provides intelligence support to the CJCS, Joint Chiefs of Staff (JCS), unified commands, and forces of joint combatant commands. He is responsible for day-to-day and joint staff functions including control of the National Military Joint Intelligence Center.

National Military Joint Intelligence Center (NMJIC). The NMJIC is the focal point for intelligence support to joint operations. The NMJIC is composed of representatives from the Defense Intelligence Agency (DIA), CIA, National Security Agency (NSA), Central Imagery Office (CIO), National Reconnaissance Office (NRO), and military services. H has access to all DIA resources and the agencies within the national intelligence community. As the top level of joint intelligence architecture, the NMJIC is the channel through which joint force commander’s intelligence and Cl needs are tasked to appropriate national agencies. The NMJIC coordinates direct connectivity as required between national intelligence activities and deployed forces. The NMJIC also coordinates deployment of National Intelligence Support Teams (NISTs) comprised of representatives from DIA, CIA, and NSA. These teams deploy with portable communications equipment and provide direct connectivity into the national intelligence community and the NMJIC. A NIST can deploy to any echelon to include deployed operational forces.

Deputy Chief of Staff, Intelligence (DCSINT). The DCSINT directs, coordinates, and develops policy for Army IEW and Army IEW support to joint operations. He oversees numerous Army intelligence organizations at the national and departmental levels that support joint operations. The office of the DCSINT is the Army authority for intelligence operations, intelligence policy matters with national level agencies, and coordination with Joint Staff and other services as well as allied and foreign countries.

Theater J2. The theater or combatant command J2 assists the theater Commander in Chief (CINC) in developing strategy, planning theater campaigns, organizing the theater intelligence effort, and establishing command relationships for effective unified and joint operations. The J2 is responsible for determining the requirements and direction of the intelligence effort to support the commander's objectives. He assists the commander in ensuring that intelligence objectives are correct, understood, prioritized, synchronized, and acted upon. The J2 is also responsible for employing joint force intelligence resources, identifying and integrating additional intelligence resources such as the JIC, and applying national intelligence capabilities. He works with other J2s and service G2s to develop complementary intelligence operations which support the commander's requirements. He oversees the theater's Cl operations and force protection effort. The theater J2 also—

- Recommends to the CINC the priorities for intelligence planning, products, and acquisition of intelligence resources.
- Establishes the intelligence architecture within which the component commands and other subordinate commands operate.
- Sets intelligence collection priorities through collection and production tasking and the allocation of intelligence resources and communications.
- Directs the activities of the J2 staff and the JIC.
- Serves as the focal point for receiving, validating, and issuing requests of national systems' support of theater, joint, and component intelligence requirements.
- Manages theater intelligence communications and processing systems, and ensures subordinate commands possess adequate intelligence communications and processing capabilities.

Functional and geographical combatant commands are uniquely organized for their particular missions and area of responsibility. US European Command and US Pacific Command are examples of theater or geographical combatant commands. US Special Operations Command is an example of a functional combatant command. The command's IEW structure is tailored to support these requirements. The intelligence assets available at each command include--

- Intelligence and CI.
- I&W.
- Special security office (SS0).
- Cryptologic support group (CSG).
- Laison officers.

- Joint Interrogation Facility (JIF), Joint Captured Materiel Exploitation Center (JCMEC), and Joint Document Exploitation Center (JDEC).

The J2 staff has intelligence experts from each of the command's subordinate service components. The staff provides the CINC and J2 with information on each component's intelligence capabilities, limitations, and requirements. The staff may include additional support elements from each subordinate command.

Theater JIC. The theater or combatant command JIC is the principal element for ensuring effective intelligence support for combatant command CINC and theater forces. Not all CINCS have a JIC assigned to their command, but are supported by a regional JIC. The JIC is an all-source center that produces intelligence to satisfy the requirements of the CINC and subordinate units. The JIC also provides intelligence support to national and subordinate commands within the theater. The JIC can expand or contract in size and scope of operations based on the requirements of the CINC and theater forces. The JIC may also attach an intelligence support element (ISE) to supported commands within the theater. Combatant commanders who have a JIC, organize it in the manner best suited to satisfy their intelligence requirements. Normally the theater JIC—

- Coordinates the intelligence efforts of subordinate commands.
- Coordinates the theater collection plan and employment of theater organic sensors.
- Provides national and subordinate commands with a single, coordinated intelligence picture by fusing national and theater intelligence into all-source estimates and assessments.
- Develops and maintains data bases which support planning, operations, and targeting.
- Provides IEW support to US military assistance advisory groups.
- Supports deep targeting.
- Validates BDA from higher, lower, and adjacent sources.

Joint Task Force J2. The JTF J2 is responsible for determining the requirements and direction of the intelligence effort to support the JTF commander's objectives. He assists the commander in ensuring that intelligence objectives are correct, understood, prioritized, synchronized, and acted upon. The J2 is also responsible for employing joint intelligence resources, identifying and integrating additional intelligence resources such as the JIC, and applying national intelligence capabilities. He works with subordinate service G2s (S2s) to develop complementary intelligence operations which support the JTF commander's requirements.

Joint Task Force JIC. The JTF JIC is the primary J2 organization supporting the joint force commander and the ARFOR. The JIC facilitates efficient access to the entire Department of Defense (DOD) intelligence system. The composition and focus of each JIC varies according to the commander's needs but each possesses the capability to perform I&W, current intelligence, collection management, and dissemination. The JIC is dynamic, flexible, and an expandable structure exemplified by the NMJIC and theater JICs such as the Central Command (CENTCOM) J/C. Through the J/C, ARFORs coordinate support from Air Force, Navy, and Marine Corps; national; interagency; and combined or allied resources.

Theater Army G2. The theater Army G2 is responsible to the Army service component (ASC) commander for all Army intelligence activities within the ARFOR assigned to the unified or subunified command. He supports and receives guidance from the combatant command J2. The G2—

- Serves as the component focal point for ground force intelligence.
- Supervises all facets of the theater Army IEW operations, including collection management, and all-source production to satisfy the intelligence needs of the commander.
- Provides ISEs for liaison with Army, joint, combined, and allied military organizations and their associated intelligence organizations and services.
- Recommends standard tactical missions and command relationships of theater IEW assets supporting the ground forces of subordinate, joint, or combined commands or other IEW organizations in the theater.
- Exercises direct supervisory control of the ACE of the theater MI brigade.

Theater Military Intelligence Brigade. Each theater MI brigade is regionally and functionally tailored according to the requirements of the specific theater. The theater MI brigade provides multidiscipline IEW support normally to the Army G2; however, in certain theaters, the brigade provides echelon above division support to the theater under the direction of the J2 vice G2 and may be integrated into the J2's operations. The theater MI brigade may provide support to a JTF or to forward deployed ECB forces. The theater MI brigade provides—

- Multidiscipline IEW support to ASC, JTF, and forward deployed ECB forces.
- Personnel for the CMISE which reinforce organic capabilities of the deployed corps. The combination of the theater JIC, CMISE, and theater MI brigade ACE, forms a continuous bridge from the corps to the JIC and beyond to national agencies.
- Support to the joint intelligence structure with ground component intelligence.

The theater MI brigade organic assets vary by theater. Its capabilities may include-

- Deployable high frequency, LOS intercept, DF, and jamming.
- Reinforcement to national sensor nodes in the theater to leverage strategic signals and IMINT collection and processing systems for the ASC and supported corps.
- MDCI.
- Interrogation, document exploitation, and other HUMINT collection.
- TECHINT collection and exploitation.
- MASINT collection, analysis, and reporting.
- Operational intelligence products for deployed forces such as graphic templates and annotated imagery.
- Access to weather information through the IMETS and the EAC Air Force weather team.
- Finished products pertaining to general MI, S&TI (to include support to reprogramming of smart weapons), and CI.

Theater Army ACE. The theater Army ACE supports the Army commander and subordinate ARFOR. It is directly supervised by the G2 and normally collocates with the G2 staff. In certain theaters, the ACE may be integrated into the J2 operations and serve as the nucleus for the JIC. The theater Army ACE is the focal point for planning, directing, and coordinating ground force IEW operations. Theater SIGINT control and analysis resources are integrated with all-source analysis, production, and collection management within the ACE. The theater Army ACE—

- Performs collection management, all-source intelligence production, and intelligence and information dissemination.
- Supports national, joint, and combined commands with key intelligence products through the Intelligence BOS.
- Manages the exchange of intelligence, taskings, and requests among all Army IEW elements in the theater.
- Coordinates requests for IEW support between national-level agencies, sister services, allied forces, and ECB units. It supplements the organic collection capabilities of supported commands.
- Translates SORs into specific SIGINT collection requirements and tasks specific SIGINT assets.

- Coordinates directly with the Army technical control and analysis element (TCAE) which is collocated with NSA for access to national SIGINT data bases.

- Is the point through which Army ECB MI units receive SIGINT information and technical support from national assets, other services, or allied SIGINT assets.

- Works and coordinates with the Regional SIGINT Operations Center to create and maintain threat data bases.

Corps Military Intelligence Support Element. The CMISE provides the corps commander with an expanded and flexible intelligence capability. The CMISE is a direct support unit from the theater MI brigade tailored to meet the intelligence requirements of the supported corps. Its soldiers form a team of experts familiar with corps, theater, and national intelligence systems and structures. The CMISE fully integrates into the corps intelligence structure under the operational control of the corps G2.

The CMISE serves as a bridge between theater and national intelligence agencies and their tactical consumers at ECB. Within the theater, CMISE leverages the JIC to ensure it focuses on support to the corps during operations. It must work in cooperation with, and be complementary to, the JIC to fully exploit the capabilities of the intelligence system. The CMISE also provides the corps greater access to national intelligence structures through affiliation with the theater MI brigade and INSCOM. Figure 5-2 shows joint and services intelligence organizations accessible through the CMISE.

The CMISE can perform the following functions for the corps:

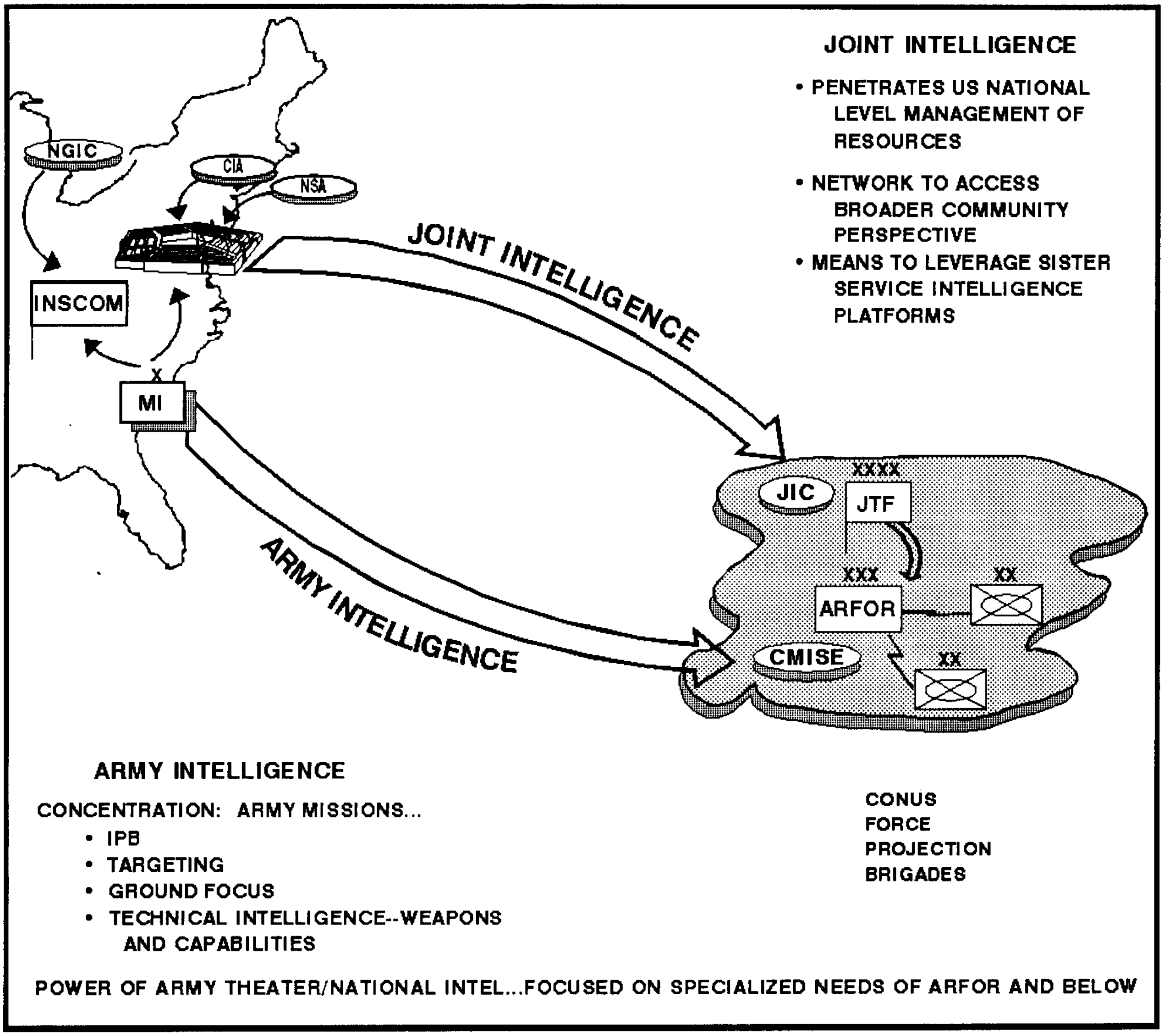
- Provides additional capability to do split-based operations. Members of the CMISE provide continuity during exercises or contingencies when they remain at home station, pull intelligence from higher echelons, and push finished intelligence to the corps.

- Provides an ISE with deployed elements of the corps to facilitate greater continuity and expanded links to higher echelons.

- Monitors other countries in the corps AI while the MI brigade focuses on an exercise or contingency operation.

- Expands the number of regions or countries the corps can monitor and provides a strategic intelligence capability focused on the commander’s requirements.

- Supports the corps at any point during an operation with versatility in intelligence support and access to higher echelon intelligence.



JOINT INTELLIGENCE

- PENETRATES US NATIONAL LEVEL MANAGEMENT OF RESOURCES
- NETWORK TO ACCESS BROADER COMMUNITY PERSPECTIVE
- MEANS TO LEVERAGE SISTER SERVICE INTELLIGENCE PLATFORMS

ARMY INTELLIGENCE

CONCENTRATION: ARMY MISSIONS...
- IPB
- TARGETING
- GROUND FOCUS
- TECHNICAL INTELLIGENCE--WEAPONS AND CAPABILITIES

CONUS
FORCE
PROJECTION
BRIGADES

POWER OF ARMY THEATER/NATIONAL INTEL...FOCUSED ON SPECIALIZED NEEDS OF ARFOR AND BELOW

Figure 5-2. Joint and service intelligence organizations accessible through the CMISE.

Joint Intelligence Operations:

Key responsibilities of intelligence organizations in joint intelligence operations are to—

- Support unified, JTF, and component commanders.
- Establish, if necessary, a JTF JIC to centrally manage the joint intelligence effort.
- Integrate intelligence received from component units with that provided by the joint, national, combined, and interagency resources to satisfy the needs of the joint commander.
- Coordinate component EW efforts to support the joint effort.

- Facilitate expedient and efficient access to the entire DOD intelligence structure in support of joint operations.

The combatant command and joint force commanders do not have organic collection assets. The CINC or JTF commander relies on national and subordinate commands for collection assets. These may include joint force collection assets, assets organic to the service component commands, SOF, or other subordinate commands within the theater. They may be Air Force, Navy, Marine Corps, or Army assets organic to INSCOM EAC brigades. The J2 must task collection assets through the component command, combined command, or other appropriate command channels.

Joint Intelligence Procedures:

When serving on a joint staff, Army intelligence personnel comply with joint doctrine, Joint Publication 2-series, and Joint Publication 3-0.

Collection management at the joint level differs slightly from Army doctrine. At the joint level, dissemination responsibility lies with the joint equivalent of the mission manager not the asset manager.

The joint staff ensures that component data bases and communications systems are interoperable.

Joint Publications 2-0, 2-01, and 2-02 contain more details on national intelligence agencies; the NMJIC and lower echelon JICs; joint TTPs for intelligence support to joint, combined, and allied commands; and the communications and ADP systems which make that support possible.

COMBINED OPERATIONS

This section implements STANAG 2936.

In combined operations, forces of two or more nations work to accomplish the mission. Combined organizations conduct IEW operations based on established international standards, such as the North Atlantic Treaty Organization (NATO) and STANAG 2936. Other coalitions and alliances must adjust the concept of IEW support to meet the common goal. Furthermore, most potential allies will not possess the range of US capabilities to collect and process intelligence. All personnel work to eliminate differences in culture, language, terminology, and operational concepts. See Joint Publication 2-0 for specific information on this subject.

Combined Intelligence Organizations:

Combined intelligence organizations vary according to the type of operation, commander’s intelligence requirements, security concerns, and capabilities of each participant. The joint intelligence structure discussed earlier provides a framework for organizing the combined intelligence effort. However, the final combined intelligence structure should be one in which allied, coalition, and US commanders receive the information necessary to successfully conduct the operation.

Allied organizations like NATO are permanently organized with established relationships and procedures. The Army helps resource the permanent intelligence staff but may still augment that staff with an ISE.

Military operations with coalition partners take place under bilateral, multinational, or United Nations (UN) auspices. Military coalitions are temporary organizations that last only for the duration of a crisis or war. The coalition commander establishes organizations, relationships, and procedures for coalition units. The Army helps resource an ISE to coalition staffs from the theater MI brigade.

Combined Intelligence Operations:

Army staffs coordinate support from coalition and allied partner intelligence resources through the ISE of the combined staff. Coalition and allied partners provide translator and interpreter support to complement Army linguist capabilities.

Combined IEW operations are based on the following principles:

Adjust National Differences Among Nations. Effective combined operations require adjusting IEW operations to minimize differences in national concepts of IEW support. Routinely conducting combined exercise and intelligence operations are two ways of eliminating differences and improving intelligence readiness.

Unity of Effort Against Common Threat. The threat to one member of an alliance or coalition should be considered a threat to all.

Determining and Planning Intelligence. The combined command and national forces' intelligence requirements, production, and use should be agreed upon, planned, and exercised in advance.

Special Arrangements. Special arrangements should be made, when necessary, to accommodate national differences in culture, language, terms, doctrine, methods of operation, communications, and structures. An example would be the positioning of a Joint STARS downlink terminal with a non-US coalition command.

Full Exchange of Intelligence. Each nation should share intelligence which supports military operations and attains alliance or coalition objectives. Every attempt should be made to ensure alliance and coalition commanders are provided the intelligence needed to protect their forces and achieve success. This may require gaining permission from national intelligence agencies for the declassification or sanitization of previously restricted intelligence. Once permission is gained, the exchange of intelligence must be monitored to ensure it complies with foreign disclosure policies and procedures.

Complementary Intelligence Operations. The strengths and weaknesses of each nation's IEW forces and operations should be evaluated to determine the best blend of capabilities available to accomplish the mission.

Combined Intelligence Centers. Where there is a combined command, there should also be a combined intelligence center. The center should consist of an intelligence staff composed of members from each nation and, in addition to conducting intelligence operations, be able to translate and disseminate products in various national languages of the command.

Liaison Exchange. The exchange of intelligence personnel between alliance or coalition partners bridges national differences and ensures access to intelligence resources of each nation.

Combined Intelligence Procedures:

Joint Publication 2-O provides specifics for these procedures. In addition, the-

- Coalition commander determines standardized procedures for coalition forces.
- Combined staff ensures that allied and coalition forces use interoperable data bases and communication systems.
- American, British, Canadian, and Australian (ABCA) forces have agreed to abide by Quadripartite Standardization Agreements QSTAGs), which generally mirror Standardization Agreements (STANAGs). AR 34-1 contains further information on these agreements.

NATO Forces have agreed to abide by STANGs which--

- Ensure a four-step intelligence cycle (plan and direct, collect, process, and disseminate).
- Standardize the intelligence estimate content and format.
- Establish intelligence reporting procedures and format of request for intelligence information (RII).

INTERAGENCY OPERATIONS

MI units routinely operate as part of an interagency team or receive support from nonmilitary intelligence agencies. Interagency operations occur between Army units and Federal, state, and local agencies or international agencies. In a particular crisis or operation, the Army component may be under the direction of a US Government agency or other civilian agency. Interagency operations require a cooperative approach to the coordination, exchange, and integration of intelligence within the constraints of AR 381-10. MI units involved in this type of operation need to understand how the agency provides support to operators, planners, and policymakers to conduct successful operations. Joint Publication 2-01 contains more information on interagency operations.

Interagency Intelligence Organizations:

The organization varies depending upon the situation and the mission. Certain efforts such as counter-drug operations are well-established. More often than not, the Army component staffs negotiate specific relationships with other US agencies during specific crises. Some agencies such as NSA and DIA have long established interagency relationships with the military.

Interagency Intelligence Operations:

Other US agencies can provide HUMINT, SIGINT, and IMINT support to Army units. Army intelligence should take advantage of this capability, whenever possible.

Interagency Intelligence Procedures:

Usually the Army component establishes new procedures for each operation involving another US agency. Some key procedural issues in interagency operations are **releasability, write-in authority,** and **dissemination of intelligence.**

Releasability. The Intelligence BOS supports all operations to the maximum extent possible. In interagency operations, maximum intelligence support requires that the tasked Army and US Government agencies or other civilian organizations have authority to exchange information and intelligence required to carry out their responsibilities. This two-way flow of information is part of a seamless Intelligence BOS architecture.

At a minimum, the Army component needs authority to release information, when necessary, to subordinate and adjacent units and to other services. Some types of information may require sanitization to protect sources and follow-on collection operations. Intelligence staffs must establish procedures for release of specific types of information between the Army and other agencies before the operation begins, if possible. Various US Government, DOD, and Army regulations (ARs) control releasability and specify procedures for release. ARs 380-5, 381-1, 381-10, and other 380- and 381 -series regulations contain further information.

Write-in Authority. Army intelligence elements at each echelon require the ability and the authority to write information into data bases which they receive from higher echelons. National intelligence agencies, JICs, and theater ACEs maintain a wide variety of intelligence data bases. Each echelon needs the capability for automated receipt, update, transfer, and return of data bases between echelons.

One example is the DIA’s military intelligence integrated data base system/integrated data base (MIIDS/IDB). The ACE at corps, division, or separate brigade, or the intelligence element of an Army component in any interagency, joint, or combined operation, may need the capability to receive a portion of the MIIDS/IDB which focused on the requirements of that echelon or operation. They also need the write-in authority and automation to update the MIIDS/lDB at their echelon, to manipulate the data, and to pass it back to DIA or transfer the data base to subordinate or adjacent units. A two-way flow of data base information is part of the seamless intelligence architecture. It can help provide a common picture of the AO to commanders at all echelons and support distributive production of intelligence in the Intelligence BOS.

Dissemination. In interagency operations, Army commanders and civilian leaders require information and intelligence upon which to base decisions as urgently as in any other category of operations. Dissemination of intelligence must be as fast and direct as possible. US Government, DOD, and Army security requirements must be considered. Memorandums of Understanding or Letters of Agreement may be required. The Army and civilian agency intelligence staffs should complete negotiations and agreements on intelligence dissemination policies and procedures before the operation begins.

Exchange of intelligence liaison teams can greatly enhance the effectiveness of dissemination. The intelligence liaison officer can sanitize incoming information as it is received, and when necessary, interpret the information which nonmilitary staffs may not understand.

The Army and the government agency should use compatible communications and ADP systems. The commanders and leaders in an interagency operation must be able to receive information from anywhere in the intelligence system and also contribute information into the system.

CHAPTER 6

OPERATIONS OTHER THAN WAR AND SPECIAL OPERATIONS

> *The problem is to grasp, in innumerable special* cases, *the* actual *situation which is covered by the mist of uncertainty, to appraise the facts correctly and to guess the unknown elements, to reach a decision quickly and then to carry it out forcefully and relentlessly.*
>
> —Helmuth von Moltke, 1800-1891

US Army units conduct OOTW and special operations during peace and conflict. Not all of these operations require the use of force. The national command authority employs all types of forces in 00TW. Army Special Operations Forces (ARSOF) are specially organized, trained, and equipped to conduct special operations. In some types of OOTW, Ml or an ARSOF unit might be the only Army force supporting the operation. Ml personnel must consider these unique requirements when supporting OOTW or ARSOF missions.

OPERATIONS OTHER THAN WAR

The preceding chapters have described the principles and fundamentals of IEW operations in the context of conflict and war. However, the Army is, and will be in the future, often called upon to execute operations which promote peacekeeping, law and order, democracy, and humanitarian endeavors. These operations are collectively described as 00TW and, while not all require the application of force, most require IEW support.

Fundamentals of IEW Support to OOTW:

Although the principles of IEW support apply equally to war and 00TW, the needs of the commander in OOTW are often quite different from those of the commander in conventional combat operations. Success in OOTW is contingent upon the commander possessing a complete understanding of the situation. This understanding often focuses on what were formerly considered nonmilitary topics such as politics, economics, and demographics. In some OOTW, understanding the population and its culture may be the commander’s keys to mission success. The nature of OOTW requires that the Intelligence BOS be fully engaged, flexible, and responsive to the challenges of these operations. Some fundamental aspects of IEW support to OOTW are discussed below.

IPB. IPB analyzes the threat and environment in a specific geographic area. It supports staff estimates, planning, and decision making. The steps of the IPB process remain constant regardless of mission, unit, or echelon. The commander must define the battlefield environment, describe the battlefields effects, evaluate the threat, and determine threat COAs. Application of these steps, however, will vary with each specific situation. The principal difference between IPB for conventional operations and IPB for OOTW is the focus and the degree of detail required to support the commanders decision making process. Other major differences include the impact of the political situation, to include such things as legal mandates or terms of reference, and the enormous demand for demographic analysis. New information categories will emerge for the commander as he directs troops and accomplishes missions in the OOTW environment.

Collection management. Collection management in OOTW may differ somewhat from collection of intelligence in conventional operations. PIR and IR will be many and varied as will be the collection resources and methods. For these reasons, the "dispersed battlefield" collection plan format may be the most effective for operations such as peacekeeping. The dispersed battlefield collection plan format lends itself to situations where there are many diverse PIR and the availability of collection systems is far outweighed by the number of requirements. This type of collection plan assists the commander and G2 (S2) by providing techniques which carefully prioritize each indicator and SIR, in addition to the supported PIR and IR. For detailed guidance on the dispersed battlefield collection plan, refer to FM 34-2.

Standardized checklists. Standardized checklists can also enhance the collection effort by focusing attention towards answering PIR and IR, even when a situation is unique or personnel are new to the operational environment. The checklists also help to speed the train-up time of intelligence sections and units. Some examples of checklists used during peacekeeping operations in Somalia, in 1993, included the Area Assessment Checklist, Convoy Debrief Checklist, Roadblock Checklist, and the Airfield Security Checklist. Overall aspects and considerations of each checklist will need to be modified to each situation and to the operational environment.

Intelligence disciplines. All the intelligence disciplines should be employed to the fullest extent possible. The following describes how each discipline contributes to the overall intelligence picture:

- **HUMINT.** HUMINT is the most important discipline in many OOTW activities for collecting information and understanding the AO. Whether collected by US or host nation personnel, HUMINT contributes the most to understanding the population, its culture and needs, and the operational environment. HUMINT in many OOTW activities is derived from non-MI military and civilian personnel in the AO. In peacekeeping, information gathered by patrols, observation posts, and roadblocks provides a substantial amount of information for MI analysts to evaluate. UN workers are a source of information during humanitarian relief operations. In OOTW, every individual is a potential source of HUMINT.

- **IMINT.** IMINT assets should be used to enhance the commander's common picture of the battlefield. Imagery of key facilities, belligerent dispositions, staging areas, obstacles, and potential trouble spots can speed the commander's planning process by greatly reducing the uncertainty involved in the operation. Use assets from all levels, to include those of national and coalition partners, if involved in combined operations. Simple assets such as helicopters and UAVs, are excellent for performing short-notice missions, such as route reconnaissance.

- **MASINT.** MASINT systems measure objects or events in order to identify them by their signatures. As in combat operations, MASINT systems can provide or enhance coverage of areas not under or beyond the range of visual observation.

- **SIGINT.** SIGINT assets provide the commander with valuable, often NRT intelligence on threat and belligerent intentions, readiness, and dispositions by intercepting and locating command, maneuver, fire support, reconnaissance and logistics emitters.

- **MDCI.** MDCI personnel play an active role in force protection in OOTW. MDCI teams provide the commander with information on how well threat forces can see his forces, and the commands vulnerability to threat intelligence collection, as well as information regarding the current terrorist threat level.

Dissemination. Dissemination of intelligence products should be conducted using standard report formats. Intelligence personnel should ensure that liaison officers pass intelligence products to ail parties requiring them in joint or combined operations. PSYOPS units are also very useful in disseminating peacekeeping operation objectives and ensuring that friendly efforts are fully understood by belligerent parties and the civilian population.

Operations Other Than War Activities:

OOTW encompasses a variety of activities. Some operations such as show of force, attacks and raids, and noncombatant evacuation operations require the IEW support of a combat operation. Humanitarian assistance and support to counter-drug operations are OOTW activities that may not involve the use of force, but do require intelligence support to accomplish the mission. Though not an all-inclusive listing of OOTW missions, an understanding of the following OOTW activities and their IEW support can serve as a basis for planning future OOTW.

Support to Domestic Civil Authorities. In times of domestic emergency, the Federal Government may direct the Armed Forces to assist civil authorities. Within CON US, the Army has primary responsibility for such assistance. Army units support disaster relief, humanitarian assistance, and similar operations. Federal law also authorizes the use of military force to suppress domestic violence or insurrection. Under the provisions of the Posse Comititus Act, though, neither the AC nor the US Army Reserve may execute the law in the place of duly appointed law enforcement officials without specific presidential or congressional approval and direction.

Historical Perspective

Operation Garden Plot

On the afternoon of 29 April 1992, the worst civil unrest since the 1960s erupted in the streets of Los Angeles (LA). Forty-four people died, and hundreds were injured before order was restored. Property damage reached the billion dollar mark. It began as a small disturbance in south central LA, but quickly escalated and spread rapidly throughout the city and county. The violence initially overwhelmed law enforcement agencies, resulting in the burning of large areas of the city. The governor of California committed the state police and two thousand National Guard soldiers to assist in restoring law and order on 30 April. Following a Presidential Executive Order on 1 May, JTF-LA was formed. The Executive Order federalized units of the California Army National Guard (CAARNG) and authorized active military forces to assist in the restoration of law and order. JTF-LA formed and deployed within 24 hours. It operated in a unique domestic disturbance environment, while working with city, county, state, federal agencies, and the CAARNG. JTF-LA was completely successful in meeting the three objectives defined in its mission statement which were— assume command and control of federalized National Guard and AC Marine and Army forces, establish liaison with local law enforcement agencies, and conduct civil disturbance operations to restore order in the greater LA area.

A full complement of intelligence analysts were required to support the assault command post (ACP) during Operation Garden Plot. Law enforcement agencies generally have adequate data collection capabilities, but lack the ability to perform detailed intelligence analysis. Considerations for the G2 (S2) in an operation such as Garden Plot may include points similar to the following:

- **Conduct the IPB process in an exceptional degree of detail to support the JTF commander's decision making process. This detail will require a full demographic analysis of the area. IPB graphics produced during a terrain analysis of the target area may include a population status overlay, a key facilities and target overlay, and a LOC overlay.**

- **Evaluate the threat and build an accurate threat model which will require dependence on information from a wide variety of sources and agencies. In Operation Garden Plot, military forces established intelligence exchange with suburban police departments, local city command posts, the Los Angeles Police Department (LAPD), the LAPD emergency operations center, the city command center, the sheriffs office, the Federal Bureau of Investigation (FBI), and the Bureau of Alcohol, Tobacco, and Firearms. Close and effective liaison must be established with all potential sources and agencies. Local law enforcement agencies have access to HUMINT, often unavailable to the military. The intelligence staff of the law enforcement agencies have unparalleled expertise in civil disturbances and gang behavior, while** military analysts are in the best position to apply this experience to civil-military operations.

- Analyze threat patterns and activities. Analysts should keep in mind that gangs and other criminal elements may change their normal patterns of activity when military forces are present, making pattern analysis extremely difficult.

- **Obtain force protection information.** Civil disturbance missions require an especially robust MDCI capability. MDCI personnel can be used to obtain force protection information, but given the restrictions of AR 381-10 on the use of Ml assets to collect on US citizens, it may be more appropriate for military police and other non-Ml personnel to perform the function.

- Anticipate the need to procure additional communications equipment to support intelligence operations during civil disturbances. During Operation Garden Plot, units used a variety of government-owned, off-the-shelf purchased, and personally owned equipment to effectively conduct operations. Additional communications equipment included such things as cellular phones, faxsimile machines, and police scanners.

- Use imagery assets whenever possible. Aerial photographs of the target area to include key facilities, intersections, ra~y and staging areas, and potential trouble spots, can be an invaluable aid to commanders and staffs for planning and assessing operations.

Humanitarian Assistance and Disaster Relief. Humanitarian assistance (HA) includes programs conducted to relieve or reduce the results of natural or manmade disasters or other endemic conditions, such as human pain, disease, hunger, or privation that might present a serious threat to life and result in great damage or loss of property. HA, provided by US Forces, is designed to supplement or complement the efforts of the host nation, civil authorities, or agencies that may have the primary responsibility for providing HA. Disaster relief operations fall within the overall context of HA and are conducted in emergency situations to prevent the loss of life and property. Such operations may be in the form of immediate and automatic response by US military commanders or in response to requests from domestic authorities, foreign governments, or international agencies. Army elements are often responsible for supporting the implementation of assistance programs developed by the Office of Foreign Disaster Assistance within the Department of State.

Historical Perspective

Operation Provide Comfort

On 5 April 1991, President Bush announced the beginning of a relief operation in northern Iraq. Operation Provide Comfort, a joint and combined post-conflict activity with extensive SOF involvement, focused on providing humanitarian assistance and protection to the displaced Kurdish population of Iraq, following an unsuccessful attempt by Kurdish rebels to overthrow the Iraqi government. The US responded immediately. By 7 April, US aircraft from Europe dropped relief supplies over the Iraqi border. More than 6,000 soldiers from units which had just participated in Operation Desert Storm eventually redeployed to Turkey and northern Iraq in support of Operation Provide Comfort. The initial objective of the operation was to reduce the death rate among the 400,000 Kurdish refugees forced to survive in the mountains. Subsequent objectives included establishing a security zone in northern Iraq so that refugees would feel safe to return, setting up refugee camps within the secure zone, and begin repatriating Kurds to the secure zone. There were a number of problems encountered during the operation. The Iraqi government's hostility towards the Kurds, combined with the continued presence, threats, and harassment of Iraqi military, police, and secret police, made many Kurds reluctant to return to their homes. Additionally, the initial security zone did not include the city of Dahuk, which was the origin of most of the refugees.

IPB for HA and disaster relief operations must be part of the deliberate planning process. For disasters, as in all no-notice operations, there is always danger. A military presence is often required before IPB can be completed. HA missions are not immune to danger and uncertainty as was evidenced by the destabilizing effects of competing factions in northern Iraq and in Somalia. Considerations for the G2 (S2) in HA operations may include some of the following:

- Collection sources and agencies for the operation include those used in conventional military operations, as well as some that are not normally considered. Potential sources and agencies include news media, liaisons with host nation police, government, and military, as well as liaisons with nongovernment organizations, private voluntary organizations, and international organizations. As in any operation, the standard collection plan format is a valuable aid, but if PIR and IR are many and varied, then the analyst should consider the use of the dispersed battlefield collection plan format.

- Employment of IMINT, whenever possible. Use aerial platforms to photograph the extent of damage to the area and to conduct reconnaissance on key supply routes.

- Establish effective liaisons with all parties participating in HA operations.

Support to Counter-Drug Operations. Military efforts in counter-drug operations are directed primarily to support—

- Law enforcement agencies, other US agencies, and cooperating foreign governments to interdict the flow of illegal drugs at the source, in transit, and during distribution.
- Host nations which include assisting their forces to destroy drug production facilities and collaboration with host nation armed forces to prevent export of illegal drugs.
- Iterdiction efforts which center on monitoring and detecting illegal drugs in transit.
- Domestic counter-drug operations which include military planning and training assistance for domestic law enforcement agencies, equipment loans and transfers, use of military facilities, and other assistance as requested and authorized.

Historical Perspective

Joint Task Force Six

The Secretary of Defense (SECDEF) has made counter-drug (CD) operations a high priority mission for the DOD and, consequently, the Department of the Army (DA). In response to DOD guidance, the Secretary of the Army and the Army Chief of Staff signed and distributed the Army Counternarcotics Plan on 17 April 1990. This plan articulates a clear statement of intent and provides major subordinate commanders and DA staff with the broad guidance required to develop COAs. In further defining the DOD role in CD operations, the SECDEF directed all US major commands to draw up plans spelling out how they proposed to assist in the reduction of drugs coming into the US. United States Army Forces Command participation in the plan came with the activation of JTF 6 at Ft Bliss, TX. JTF 6 is designed as a planning and coordinating HQ to provide operational support from the DOD to federal, state, and local law enforcement agencies along the southwest border. The southwest border is the principal corridor for moving drugs. Over 50 percent of illegal drugs entering the US cross the international boundary extending from the Gulf of Mexico to the Pacific Coast. Drugs are smuggled via land, air, and water. Not only is Mexico a supplier of drugs, it is also a transit country for shipments from other countries. It is estimated that in 1991 there were 150-200 organized Mexican groups whose sole purpose was drug smuggling. MI personnel at JTF 6 are continually working to establish "modus operandi" for the drug smugglers. MI personnel also coordinate with the National Guard of four border states to ensure unity of effort in providing intelligence analysis, detection and monitoring, use of ground sensors, and photo-reconnaissance.

Counter-drug IPB, particularly analysis of the terrain combined with knowledge of the drug trafficking organizations, can help to identify the best locations for law enforcement agency response teams and maximize their ability to apprehend large numbers of suspects. Although counter-drug IPB is a successful tool, commanders and intelligence professionals should be cautious not to overemphasize it. Planners should be prepared to adjust all collection assets, such as listening and observation posts as experience is gained in counter-drug operations for a particular region. The drug traffickers *will* adjust their operations in reaction to your presence in the area.

Establishing the "modus operandi" for drug producers and traffickers will require the exchange of information between many sources and agencies. Potential sources of information may include domestic and host nation governments, military, police, the US Border Patrol, the FBI, the Drug Enforcement Agency (DEA), the US Customs Service, and the US Coast Guard.

Drug production and trafficking has profound influence on the local population, so the analyst must be able to recognize the effects of these influences. Examples can be subtle, such as an unexplained increase in affluence within the population or increased corruption within the government. Domestic and host nation HUMINT sources will be most suited to detect the subtle changes in the population. Other effects may be more pronounced, such as an abrupt change from food crops to drug crops, the transfer of large cash deposits to out-of-country or off-shore banks, or the eradication of extradition laws. Effective liaisons with domestic and host nation government agencies, military, and law enforcement agencies will be the key to identifying the effects of the drug trade.

Use IMINT assets to the maximum extent possible. Assets should be used to look for suspected laboratories or their construction, cache sites of drugs or materials, and agricultural areas for drug crops. Assets may also be used to look for transshipment of drugs over rugged, isolated areas and the existence of newly-constructed or cut roads or trails which may suggest new transshipment routes, agricultural areas, or drug laboratories.

Anticipate increased capabilities on the part of the drug traffickers. Communications, for instance, may begin as telephone and amateur radio, but could rapidly move to encrypted digital SATCOMS. Money is seldom an issue in drug operations and the traffickers will spend the money to acquire the technology necessary to keep their operations secure. SIGINT collectors can be very useful in supporting counter-drug operations outside US borders, especially at locating remote production or transshipment facilities.

FM 100-5 and FM 34-7 provide more detailed information on OOTW activities and IEW support to OOTW.

SPECIAL OPERATIONS

ARSOF include Special Forces (SF), Rangers, CA, PSYOPS, and Army Special Operations Aviation (ARSOA) units. All types of ARSOF perform strategic, operational, and tactical missions in war and OOTW. SOF operations are conducted during peacetime competition, conflict, and war independently or in coordination with allied forces. The Intelligence BOS supports the IEW requirements of all ARSOF missions. The five principal missions of special operations are--

- Direct action.
- Special reconnaissance.
- Counterterrorism.
- Unconventional warfare.
- Foreign internal defense.

Direct Action:

Direct action missions are short duration strikes or small-scale offensive actions which seize, destroy, or damage specific targets and capture or recover personnel or materiel. Army SF and Rangers conduct direct action missions often against targets deep within enemy controlled territory. The most frequent ARSOA mission is infiltration, exfiltration, and resupply of ARSOF by air. ARSOA supports SF or Rangers in direct action or can conduct direct action missions autonomously. Examples of IEW support include —

- Acquiring detailed knowledge of the target site.
- Identifying routes in and out of the target area.
- Determining the strength and order of battle of any threat forces that may respond.
- Identifying countermeasures to defeat enemy systems.
- Locating and suppressing enemy air threat.

Special Reconnaissance:

Army SF or ARSOA conduct special reconnaissance to obtain information not available by other means, Special reconnaissance complements national and theater collection systems to satisfy intelligence gaps and confirm information in the intelligence data base.

Special reconnaissance operations can be broken into two categories: battlefield reconnaissance and surveillance using standard tactics and techniques, and clandestine collection. Clandestine collection is complex and sensitive and may require control of SF teams by the national intelligence community.

Counterterrorism:

Counterterrorism missions involve offensive measures against terrorists including preemptive and punitive actions. Only SF units specially organized, trained, equipped, and designated in theater OPLANS conduct counterterrorism. They require detailed, responsive intelligence on terrorist personalities, organizations, logistical support, weapons, equipment, training, tactics, and information about any hostages. Counterterrorism mission planners and various national and military agencies must coordinate closely to gather, analyze, and immediately deliver the needed information to the SF unit performing the counterterrorism mission.

Unconventional Warfare:

Unconventional warfare is a broad spectrum of military and paramilitary operations against an established government or occupying power. Unconventional warfare normally involves inserting SF elements into an area controlled by hostile forces. The SF organize, train and equip indigenous forces, and support them in conducting guerrilla warfare or other direct offensive low-visibility operations, as well as indirect operations such as sabotage, subversion, or intelligence collection.

PSYOP missions are designed to influence the attitudes and behaviors of foreign enemy, friendly, or neutral audiences. In unconventional warfare, PSYOP elements try to demoralize hostile forces and reduce their will to fight.

The Intelligence BOS provides detailed all-source intelligence on the geography, targets in the area, the situation within and between partisan groups, and in-country sources of intelligence or support. Examples of IEW support to PSYOP elements include--

- Gathering information on the ethnic or religious makeup of a town or village.
- Determining attitudes and beliefs of the people.
- Identifying enemy activities or plans.
- Locating mobile target groups.
- Locating and jamming threat PSYOP transmitters.

Foreign Internal Defense:

Foreign internal defense missions support the host nation government. These missions may involve-

- SF elements which conduct actions to strengthen the host country's defense establishment.
- CA elements which set up a temporary civil administration at the request of the host nation to maintain law and order, and provide life-sustaining services until the host nation can resume normal operations. Examples of other CA actions are supporting NEO, coordinating local resources and facilities, and controlling civilian interference with US military activities.

- PSYOP elements which act to counter threat propaganda and weaken the influence of insurgent groups.
- AR50F elements which require the same types of IEW support for foreign internal defense as well as unconventional warfare. They also need to know the sources of friction within the host country that impact on the acceptability and success of the government.

In addition to the five principal missions listed above, SOF may participate in collateral activities of security assistance, HA, antiterrorism, counter-drug operations, personnel recovery, and special activities with other components,

The Joint Publication 3-series, and FM 34-7 and FM 34-130 provide detailed planning guidance for OOTW. FM 34-36 describes IEW support to ARSOF missions.

CHAPTER 7

INFORMATION OPERATIONS

> *Information is the key to successful militaty operations; strategically, operationally, tactically, and technically. From war to OOTW, the adversaty who wins the /formation War prevails.*
>
> —GEN (RET) Glenn Otis, 1991

This chapter describes and sets the doctrinal foundation for IEW support to information operations. The military operations of the future will leverage technology to distort or restrict the adversaries perception of the battlefield while protecting our own. Using all the principles discussed in preceding chapters, IEW will support the commander in winning the information war.

The effectiveness of information operations is predicated on a thorough understanding of the enemy, his C^2 system, and his decision making process. At all levels of war, the Intelligence BOS is an operational tool that assesses and exploits the vulnerabiiities of the enemy's information and C^2 systems. IEW is an integral player in C^2W and information operations. Its lead role in building information system IPB, developing C^2W COASs and assessing the effectiveness of information operations has taken Ml from a support to an operational role in military operations. IEW operations set the conditions for decisive maneuver.

INFORMATION AGE AND IEW

Operation Desert Storm and other recent operations have shown that the nature of warfare has changed dramatically with the arrival of the information age. The information age is characterized by the proliferation of information systems and the increasing ability to rapidly collect, assimilate, and disseminate information. In the information age, those with access to, or control of, these systems can immediately influence public opinion, world commerce, political dialogue, and other issues affecting the security of nations. The impact of the information age on military operations has caused a revolutionary change in the way US Forces conduct operations and the nature of warfare itself. The key to this modern form of warfare is knowledge-based operations. The key to successful knowledge-based operations is exploiting and controlling information.

The information age has changed the conduct of IEW operations. Though MI can extend current IEW support to information operations, there are several aspects of information warfare that will generate new or more detailed IEW requirements. MI must—

- Learn and refine the capability to find and identify the vulnerabilities in the critical nodes of an adversary's decision making system.

- Monitor the information warfare capabilities of potential adversaries and assess this capability as a threat to friendly battle command systems.

- Develop the analytical skills necessary to identify, depict, and exploit the information base of the opposing commander's decision making process and the global information environment.

- Ensure IEW operations effectively support the development and maintenance of the commander's common picture of the battlefield.

- Refine the methods to synchronize IEW operations of fully-modernized, digitized forces with other forces-–our own, other services, and allies.

MI must have a thorough understanding of the enemy C^2 structure and his decision making process to effectively support the development and maintenance of the commander's common picture of the battlefield. Information operations will require new analytic and synthesis techniques that describe the enemy C^2 information infrastructure in terms of the enemy commander's decision making process, and the critical nodes that allow him to exercise effective C^2 of his combat forces. Inherent is the requirement to understand how the enemy commander will be affected by specific C^2W actions and predict his response.

Another impact on the intelligence system is the need to assess the effectiveness of the information operations effort. This "electronic" BDA **will** allow commanders to adjust their efforts to maximize the effects on the enemy. An important aspect of this "electronic" BDA will be real-time analysis and synthesis to determine when information operations have created a vulnerability in the enemy C^2 structure that can be exploited by fire and maneuver. Information operations pose a unique challenge to BDA because the effects of C^2W on the enemy C^2 may not be in the form of physical damage.

INFORMATION WARFARE

> *The battlefield is a scene of constant chaos. The winner will be the one that best controls that chaos, both his and that of his enemy.*
> —Napoleon Bonaparte, 1769-1821

The concept of information warfare states that knowledge is becoming the Army's center of gravity. Technology now allows us to improve our commander's knowledge base while we diminish and degrade the quantity and quality of the enemy commander's knowledge base. A primary measure of effectiveness in this type warfare is the commander's decision making cycle. The intelligence system plays a vital role on both sides of this equation. On the friendly side, the ability to produce a common, coherent, real-time picture of the battlefield helps to reduce uncertainty and shorten the decision making process, while effective C^2W operations significantly increase and distort the enemy's decision making cycle. Figure 7-1 illustrates some aspects of this new operational environment.

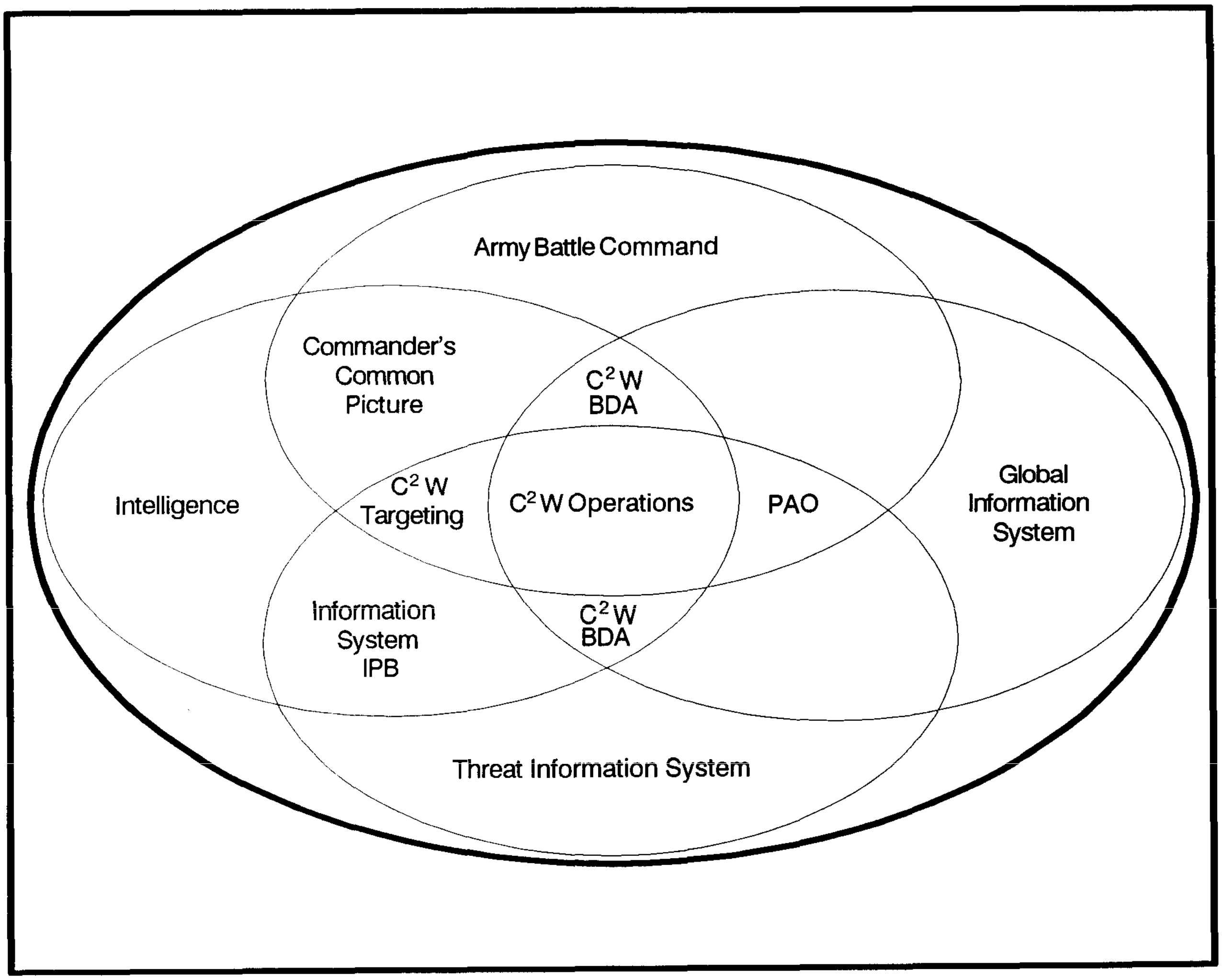

Army Battle Command
Commander's Common Picture
C²W BDA
Intelligence
C²W Targeting
C²W Operations
PAO
Global Information System
Information System IPB
C²W BDA
Threat Information System

Figure 7-1. Military operations environment.

INFORMATION OPERATIONS

Information operations are the way the Army will prepare and execute knowledge-based warfare across the full range of military operations. Information operations are essential to winning the information war on the future battlefield, and IEW is the key to successful information operations. information operations enable, enhance, and protect the commander's decision making cycle while influencing an opponents. This is accomplished through effective intelligence, battle command, and C^2W operations as an integral part of joint, combined, or interagency operations. Battle command is about imposing control on the compressed dimensions of battle space by achieving and sustaining a high tempo of operations, overwhelming lethality, and superior survivability. Supporting battle command, information operations are conducted across the full range of military operations.

In peacetime, information operations are conducted at various levels of intensity against assorted adversaries. In 00TW situations where restraint is often required, nonlethal C^2W is used to bring about a desired response from threat forces. In cases where the use of force is unavoidable, all elements of information operations are employed in concert to best achieve the objective. The effective pairing of the attack means with the information operation's targets is largely dependent on understanding and predicting the impact of the targeting effort on the adversary's decision making process.

The IEW battle space is frequently global as was demonstrated in Operation Desert Storm. The vast array of systems and sources available to the intelligence community will require a universal vision of the battlefield as shown in Figure 7-2. This vision is crucial in providing the analytical perspective required to give commanders a common picture of the battlefield. The commander's ability to increase the quality of his decisions and compress his decision making process is directly related to his ability to visualize current and future situations. This common picture binds the intelligence and battle command functions together.

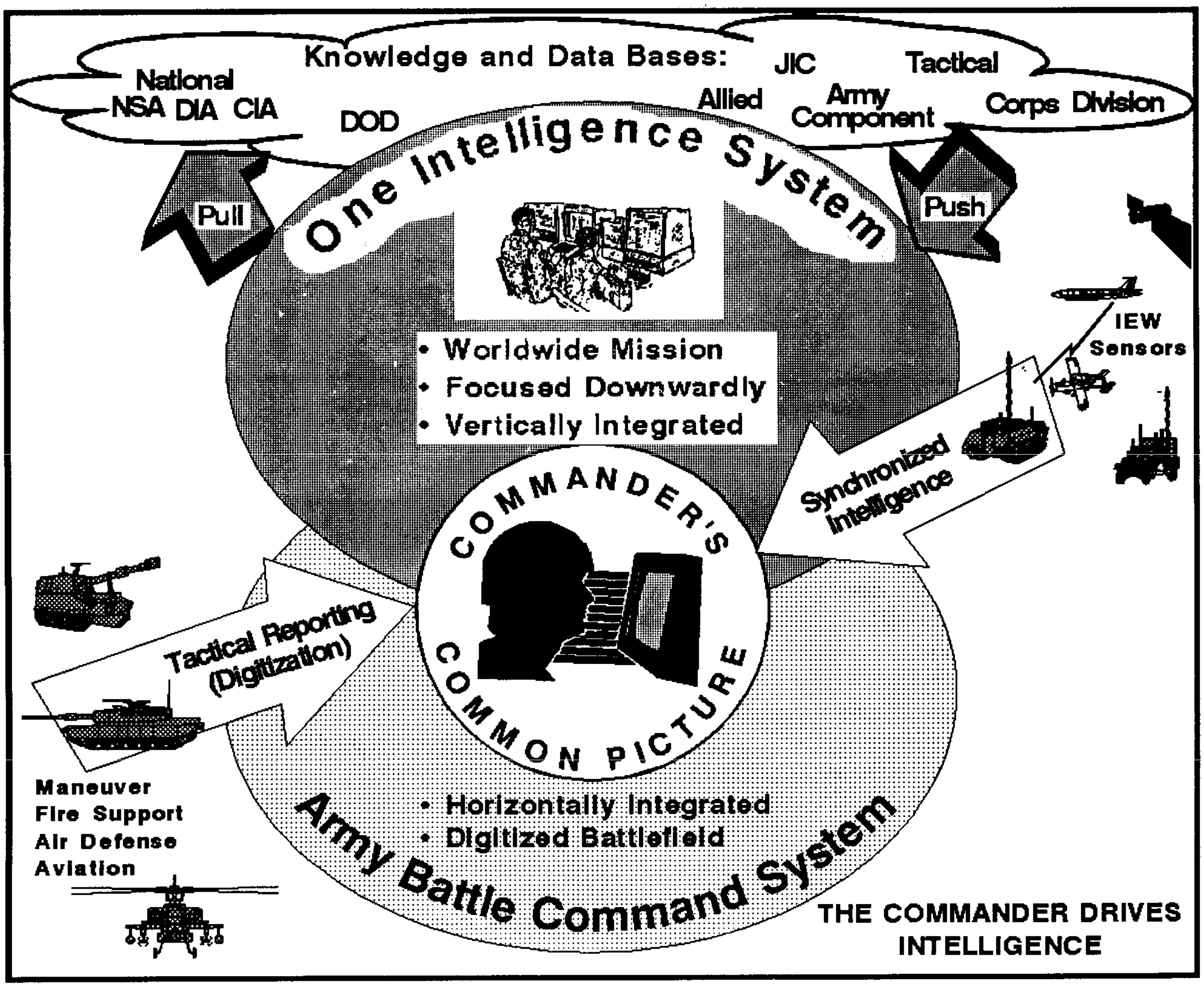

Knowledge and Data Bases:
National
NSA DIA CIA
DOD
Allied
JIC
Army Component
Tactical
Corps Division
Pull
Push
One Intelligence System
• Worldwide Mission
• Focused Downwardly
• Vertically Integrated
IEW Sensors
Synchronized Intelligence
Tactical Reporting (Digitization)
COMMANDER'S COMMON PICTURE
• Horizontally Integrated
• Digitized Battlefield
Army Battle Command System
Maneuver
Fire Support
Air Defense
Aviation
THE COMMANDER DRIVES INTELLIGENCE

Figure 7-2. IEW battle space.

COMMAND AND CONTROL WARFARE

C^2W is knowledge-based and decision oriented. It is characterized by fast-paced moves and countermoves by opposing commanders. The HVTS in C^2W are the commander's decision making processes. The objectives in C^2W are to allow friendly commanders to make better decisions rapidly (inside the threat commander's decision making cycle), while causing the enemy to make bad decisions. See Figure 7-3. C^2W integrates OPSEC, military deception, PSYOP, EW, and physical destruction with mutually supported intelligence to deny information, and to influence, degrade, or destroy adversary C^2 capabilities while protecting friendly C^2 capabilities. The C^2W part of information operations is not a system. It is a strategy that applies the primary C^2W components to reduce the adversary's C^2 capabilities (counter-C^2) while protecting friendly C^2 capabilities (C^2-protect). It applies across the full range of military operations and at all levels of war.

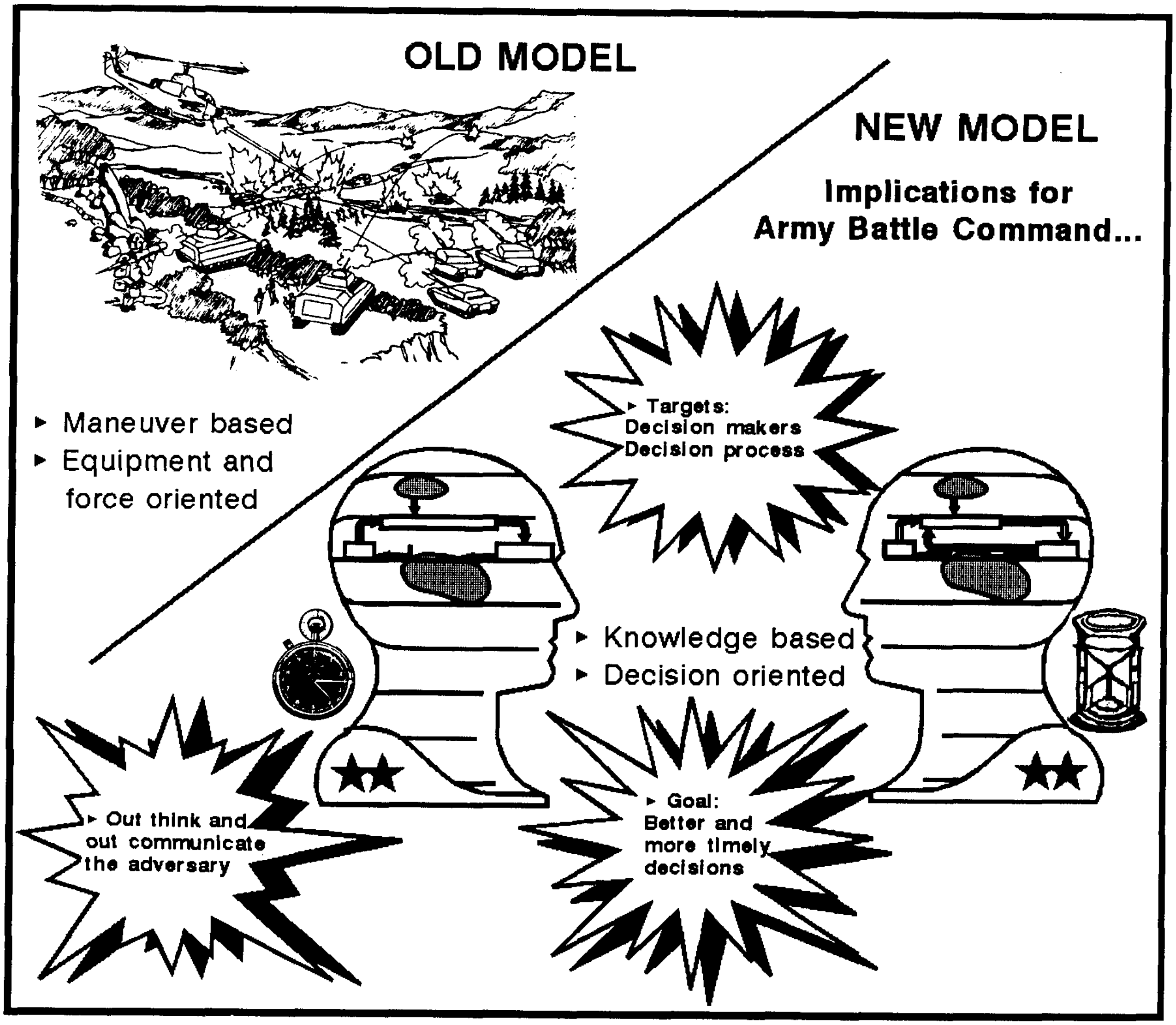

OLD MODEL
NEW MODEL
Implications for Army Battle Command...
▸ Maneuver based
▸ Equipment and force oriented
▸ Targets: Decision makers Decision process
▸ Knowledge based
▸ Decision oriented
▸ Out think and out communicate the adversary
▸ Goal: Better and more timely decisions

Figure 7-3. C^2W objectives.

C^{2}W is supported by an information system IPB. This form of IPB as shown in Figure 7-4, is the basis for developing C^{2}W COAS and targeting. The process builds upon the standard IPB but requires—

- Understanding the “art” of decision making and leadership.
- Knowledge of the technical requirements of a wide array of information systems.
- Ability to conduct highly technical processing to produce C^{2}W COA templates.

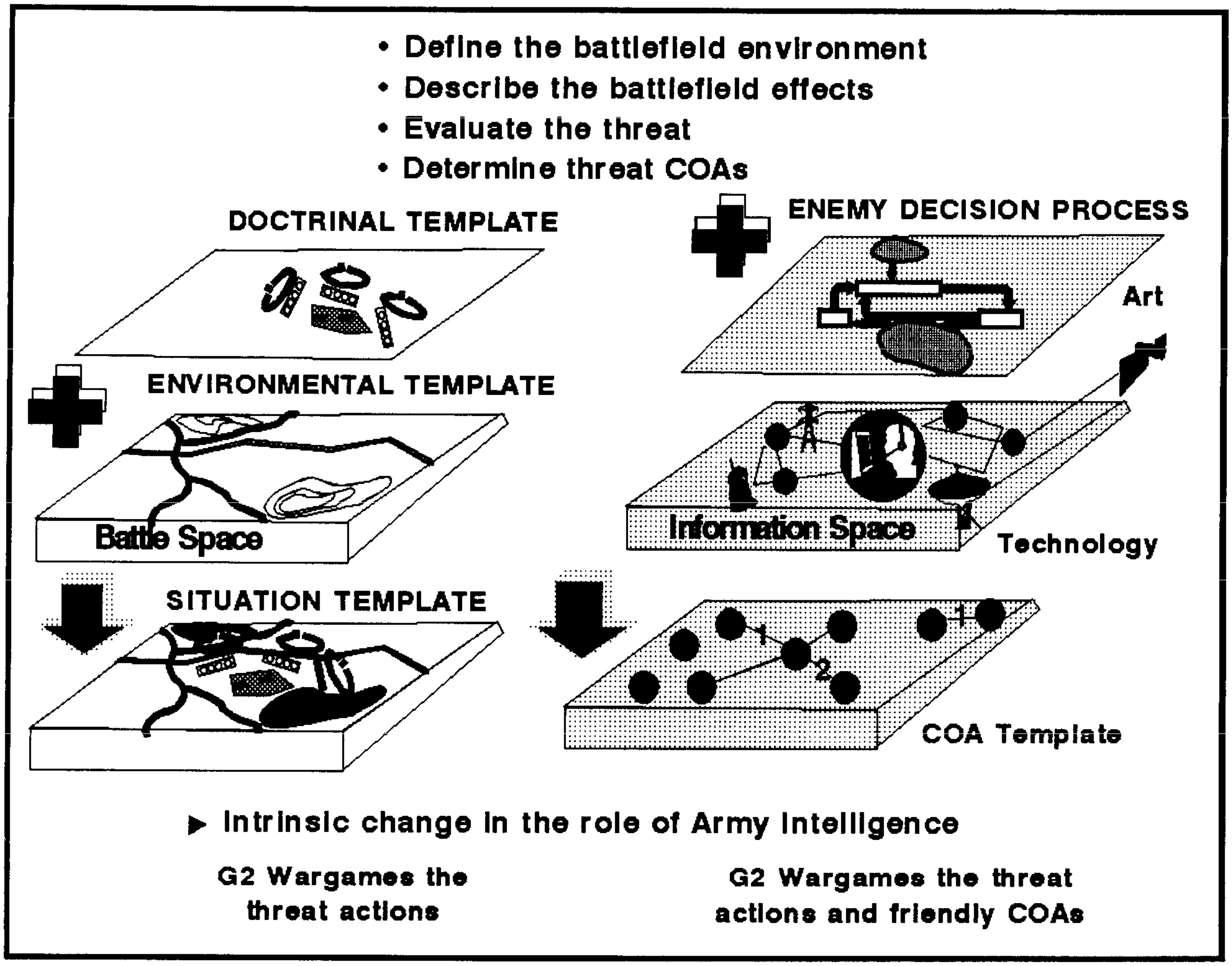

• Define the battlefield environment
• Describe the battlefield effects
• Evaluate the threat
• Determine threat COAs
DOCTRINAL TEMPLATE
ENEMY DECISION PROCESS
Art
ENVIRONMENTAL TEMPLATE
Battle Space
Information Space
Technology
SITUATION TEMPLATE
1
2
1
COA Template
▶ Intrinsic change in the role of Army Intelligence
G2 Wargames the threat actions
G2 Wargames the threat actions and friendly COAs

Figure 7-4. IPB of an information system.

The effectiveness of C^{2}W operations is predicated on a thorough understanding and assessment of the enemy's capabilities from equipment through his decision making process.

The Intelligence BOS is an operational tool that creates and exploits vulnerabilities in the enemy battle command. IEW is an operator in C^2W and information operations. From conventional and information system IPB, developing C^2W COAs, supporting information operations, and assessing the effectiveness of C^2W operations, IEW has taken on an operational role in military operations.

The more capable Army of the future will still be based on a hierarchical force level command but will be empowered by fully digitized information management systems. The commander will drive information operations just as he drives the intelligence effort. He will use information operations to focus and leverage information to better command his force and apply the elements of combat power.

GLOSSARY

Section I. Abbreviations and Acronyms

A

ABCA	American, British, Canadian, and Australian
AC	Active Component
ACE	analysis and control element
ACP	assault command post
ACR	Armored Cavalry Regiment
ACT	analysis control team
ADP	automatic data processing
AEB	aerial exploitation battalion
AI	area of interest
AM	amplitude modulation
ammo	ammunition
AMOPES	Army Mobilization and Operations Planning and Execution System
AO	area of operation
AR	Army regulation
ARFOR	Army force
ARM	antiradiation missile
ARNG	Army National Guard
ARSOA	Army Special Operations Aviation
ARSOF	Army Special Operations Forces
ASARS	Advanced Synthetic Aperture Radar System
ASAS	All-Source Analysis System
ASC	Army service component
ASL	authorized stockage list

B

BCV	battle command vehicle
BDA	battle damage assessment
bde	brigade
bn	battalion
BOS	Battlefield Operating System

C

C^2	command and control
C^2W	command and control warfare
C^3I	command, control, communications, and intelligence
CA	Civil Affairs
CAARNG	California Army National Guard
cav	cavalry
CCIR	commander's critical information requirement
CD	counter-drug
CENTCOM	Central Command
CGS	common ground station
CI	counterintelligence
CIA	Central Intelligence Agency
CINC	Commander in Chief
CIO	Central Imagery Office
CJCS	Chairman, Joint Chiefs of Staff
CMISE	Corps MI Support Element
co	company
COA	course of action
COMINT	communications intelligence
comms	communications
CONUS	continental United States
CP	command post
C-RISTA	counterreconnaissance, intelligence, surveillance, and target acquisition
CS	combat support
CSG	cryptologic support group
CSS	combat service support

D

DA	Department of the Army
DCI	Director, Central Intelligence
DCSINT	Deputy Chief of Staff, Intelligence
DEA	Drug Enforcement Agency
DF	direction finding
DIA	Defense Intelligence Agency
DISE	Deployable Intelligence Support Element
DIVARTY	division artillery
DOCC	Deep Operations Coordination Cell
DOD	Department of Defense
DP	decision point
DS	direct support
DSNET3	Defense Secure Network 3
DST	decision support template

E

EA	electronic attack
EAC	echelons above corps
ECB	echelons corps and below
ELINT	electronic intelligence
EMCON	emission control orders
EP	electronic protection
EPDS	Electronic Processing and Dissemination System
EPW	enemy prisoner of war
ES	electronic warfare support

ETUT	enhanced tactical users terminal
EW	electronic warfare
EWO	electronic warfare officer

F

FA	field artillery
FBI	Federal Bureau of Investigation
FIS	foreign intelligence service
FISINT	foreign instrumentation signals intelligence
FM	frequency modulation; field manual
FRAGO	fragmentary order
freq	frequency
FSE	fire support element
FSO	fire support officer

G

G2	Assistant Chief of Staff, G2 (Intelligence)
G3	Assistant Chief of Staff, G3 (Operations and Plans)
GBCS	ground-based common sensor
GEN	general
GPS	Global Positioning System
GRCS	GUARDRAIL Common Sensor
GS	general support
GSM	ground station module
GSR	ground surveillance radar
GS-R	general support-reinforcing
GUARDRAIL	AN/USD-9A or 9B

H

HA	humanitarian assistance
HPT	high-payoff target
HQ	headquarters
HTF	how to fight
HUMINT	human intelligence
HVT	high-value target

I

I&W	indications and warnings
IDB	integrated data base
IEW	intelligence and electronic warfare
IMETS	Integrated Meteorological System
IMINT	imagery intelligence
INSCOM	United States Army Intelligence and Security Command
intel	intelligence
INTREP	intelligence report
INTSUM	intelligence summary
IPB	intelligence preparation of the battlefield
IPDS	Imagery Processing and Dissemination System
IPW	prisoner of war interrogation
IR	information requirements
ISE	intelligence support element

J

J2	Intelligence Directorate
JCMEC	Joint Captured Materiel Exploitation Center
JCS	Joint Chiefs of Staff
JDEC	Joint Document Exploitation Center
JDISS	Joint Deployable Intelligence Support System
JIC	Joint Intelligence Center
JIF	Joint Interrogation Facility
Joint STARS/ JSTARS	Joint Surveillance Target Attack Radar System
JTF	joint task force
JWICS	Joint Worldwide Intelligence Communications System

L

LA	Los Angeles
LAN	local area network
LAPD	Los Angeles Police Department
LOC	lines of communication
LOS	line of sight
LRS	long-range surveillance
LRSU	long-range surveillance unit
LST	lightweight satellite terminal
LTIOV	latest time information is of value

M

MASINT	measurement and signature intelligence
MDCI	multidiscipline counterintelligence
METL	Mission Essential Task List
METT-T	mission, enemy, troops, terrain and weather, and time available
MI	military intelligence
MICAT	Military Intelligence Combat Assessment Tables
MIIDS	military intelligence integrated data base system
MITT	Mobile Integrated Tactical Terminal
MOS	military occupational specialty
MOUT	Military Operations on Urbanized Terrain

N

NAI	named area of interest
NATO	North Atlantic Treaty Organization
NBC	nuclear, biological, chemical
NEO	noncombatant evacuation operation
NGIC	National Ground Intelligence Center
NIST	National Intelligence Support Team
NMJIC	National Military Joint Intelligence Center
NRO	National Reconnaissance Office
NRT	near-real time
NSA	National Security Agency
NSC	National Security Council

O

obj	objective
OCONUS	outside continental United States
OEM	original equipment manufacturer
OOTW	operations other than war
OPCON	operational control
OPLAN	operation plan
opns	operations
OPORD	operation order
OPSEC	operations security

P

PAO	public affairs office
PIR	priority intelligence requirements
PLL	prescribed load list
POD	port of debarkation
PSYOP	psychological operations
pub	publication

Q

QSTAG	Quadripartite Standardization Agreement
QUICKFIX IIB	AN/ALQ-151(V)2

R

R	reinforcing
RAOC	Rear Area Operations Center
RC	Reserve Components
REDTRAIN	Readiness Training
REMBASS	Remotely Monitored Battlefield Sensor System
rep	representative
ret	retired
RII	request for intelligence information
ROE	Rules of Engagement

S

S2	Intelligence Officer (US Army)
S3	Operations and Training Officer (US Army)
S&TI	scientific and technical intelligence
SANDCRAB	airborne jamming system
SATCOM	satellite communication
SCI	sensitive compartmented information
SEAD	suppression of enemy air defenses
SECDEF	Secretary of Defense
SF	Special Forces
SHF	super high frequency
SIGINT	signals intelligence
SIR	specific information requirements
SOF	special operations forces
SOFA	Status of Forces Agreement
SOR	specific orders and request
SPIRIT	Special Purpose Intelligence Remote Integrated Terminal
spt	support
SSO	special security office
STANAG	Standardization Agreement
SUCCESS	Synthesized UHF Computer Controller Enhanced Subsystem
survl	surveillance
SWA	Southwest Asia

T

TAA	tactical assembly area
TAI	target area of interest
TB	technical bulletin
TBP	to be published
TC	training circular
TCAE	technical control and analysis element
TEB	tactical exploitation battalion
TECHINT	technical intelligence
TENCAP	Tactical Exploitation of National Capabilities
TOC	tactical operations center
TPL	time phase line
TRAC	tactical radar correlator
TRACKWOLF	AN/TRQ-152
TRADOC	United States Army Training and Doctrine Command
TROJAN	AN/FSQ-144V
TTP	tactics, techniques, and procedures

U

UAV	unmanned aerial vehicle
UHF	ultra high frequency

UN	United Nations
US	United States (of America)
USAR	United States Army Reserve
USSID	United States Signal Intelligence Directive

W

WAN	wide area network
WARM	wartime reserve modes

Section II. Terms

Area of interest - The geographical area from which information and intelligence are required to permit planning or successful conduct of the command's operation. The AI is usually larger than the command's AO and battle space. The AI includes any threat forces or characteristics of the battlefield environment that will significantly influence the accomplishment of the command's mission.

Area of operations - That portion of an area of conflict necessary for military operations. AOs are geographical areas assigned to commanders for which they have responsibility and in which they have the authority to conduct military operations.

Battle command - The art of battle decision making, leading, and motivating soldiers in their organizations into action to accomplish missions. Includes visualizing current state and future state, then formulating concepts of operations to get from one to the other at least cost. Also includes assigning missions; prioritizing and allocating resources; selecting the critical time and place to act; and knowing how and when to make adjustments during the fight.

Battle damage assessment - The timely and accurate estimate of damage resulting from the application of military force, either lethal or nonlethal, against an objective or target.

Battle space - Components determined by the maximum capabilities of a unit to acquire and dominate the enemy; includes areas beyond the AO; it varies over time according to how the commander positions his assets. It depends on the command's ability to both acquire and engage targets using its own assets or those of other commands on its behalf.

Battlefield operating system - The major functions performed by the force on the battlefield to successfully execute Army operations in order to accomplish military objectives. BOS form a framework for examining complex operations in terms of functional operating systems. The systems include maneuver, fire support, air defense, C^2, intelligence, mobility and survivability, and CSS.

BOS synchronization matrix - A written record of wargaming. The BOS synchronization matrix depicts the criteria that generate each anticipated friendly decision and the resulting action by each friendly BOS. Other information required to execute a specific friendly COA may also be included.

Branch - A contingency option built into the basic plan for changing the disposition, orientation, or direction of movement of the force.

Capability - The ability to successfully perform an operation or accomplish an objective. The evaluation of capabilities includes an assessment of a force's current situation as well as its organization, doctrine, and normal TTPs. Capabilities are stated in terms of broad COAs and supporting operations. Generally, only capabilities that will influence accomplishment of the friendly command's mission are addressed.

Center of gravity - The hub of all power and movement upon which everything depends. That characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or the will to fight.

Command and control - The exercise of authority and direction by a properly designated commander over assigned or attached forces in the accomplishment of the mission. C^2 functions are performed through an arrangement of personnel, equipment, communications, computers, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. C^2 refers to the information systems the commander and staff use to conduct operations.

Command and control-protection - The division of C^2W that seeks to deny, negate, or turn to friendly advantage of adversary efforts to destroy, disrupt, and deny information in the US and allied C^2 system, including its supporting communications, information, and intelligence activities.

Command and control system - The combination of personnel, equipment, communications, computers, facilities, and procedures employed by the commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. The basic functions of a C^2 system are **sensing** valid information about events and the environment, **reporting** information, **assessing** the situation and associated alternatives for action, **deciding** on an appropriate COA, and **ordering** actions in correspondence with the decision.

Command and control warfare - The integrated use of OPSEC, military deception, PSYOP, EW, and physical destruction mutually supported by intelligence, to deny information to, influence, degrade or destroy adversary C^2 capabilities, while protecting friendly C^2 capabilities against such action. C^2W applies across the full range of military operations and all levels or war.

Common understanding of the battlefield - How the commander and staff perceive the battlefield environment. It includes the sum of all that is known or perceived of friendly and threat forces and the effects of the battlefield environment.

Counter-command and control - Those measures taken to prevent effective C^2 of adversary forces by denying information to, influencing, degrading, or destroying the adversary C^2 system.

Course of action - A possible plan open to an individual or commander that would accomplish or is related to accomplishment of the mission. A COA is initially stated in broad terms with the details determined during staff wargaming. To develop COAs, the staff must focus on key information and intelligence necessary to make decisions. COAs include five elements: WHAT (the type of operation), WHEN (the time the action will begin), WHERE (boundaries, axis, etc.), HOW (the use of assets), and WHY (the purpose or desired end-state).

Critical node - An element, position, or communications entity whose disruption or destruction immediately degrades the ability of a force to C^2, or effectively conduct combat operations.

Decision point - The point in space and time where the commander or staff anticipates making a decision concerning a specific friendly COA. DPs are usually associated with threat force activity or the battlefield environment and are therefore associated with one or more NAIs. DPs also may be associated with the friendly force and the status of ongoing operations.

Decision support template - A graphic record of wargaming. The DST depicts DPs, timelines associated with movement of forces and the flow of the operation, and other key items of information required to execute a specific friendly COA.

Decisive point - A point, usually geographical in nature, that, when retained, provides a commander with a marked advantage over his opponent. Decisive points could also include other physical elements such as enemy formations, CPs, and communications nodes.

Delaying operation - An operation usually conducted when the commander needs time to concentrate or withdraw forces, to establish defenses in greater depth, to economize in an area, or to complete offensive actions elsewhere. In the delay, the destruction of the enemy force is secondary to slowing his advance to gain time. Delay missions are delay in sector, or delay forward of a specified line for a specified time or specified event.

Doctrinal template - A model based on postulated threat doctrine. Doctrinal templates illustrate the disposition and activity of threat forces and assets (HVTs) conducting a particular operation unconstrained by the effects of the battlefield environment. They represent the application of threat doctrine under ideal conditions. Ideally, doctrinal templates depict the threat's normal organization for combat, frontages, depths, boundaries and other control measures, assets available from other commands, objective depths, engagement areas, and battle positions. Doctrinal templates are usually scaled to allow ready use on a map background. They are one part of a threat model.

Event matrix - A description of the indicators and activity expected to occur in each NAI. It normally cross-references each NAI and indicator with the times they are expected to occur and the COAs they will confirm or deny. There is no prescribed format.

Event template - A guide for collection planning. The event template depicts the NAIs where activity (or its lack) will indicate which COA the threat has adopted.

Electronic Warfare - Consists of three subcomponents: electronic attack (EA), electronic warfare support (ES), and electronic protection (EP).

Global information systems - Non-DOD information systems (media, government agencies, nongovernmental organizations, international organizations, foreign governments, and industry) which collect, process, and disseminate information about operations. These systems largely operate autonomously and are not subject to control by the Army. The information they publish is accessible to all interested parties and can significantly impact decision making and execution.

High-payoff target - Targets whose loss to the threat will contribute to the success of the friendly COA.

High-value target - Assets that the threat commander requires for the successful completion of a specific COA.

Indications and warnings - One of the six IEW tasks.

Indicators - Positive or negative evidence of threat activity or any characteristic of the AO which points toward threat vulnerabilities or the adoption or rejection by the threat of a particular capability, or which may influence the commander's selection of a COA. Indicators may result from previous actions or from threat failure to take action.

Information - In intelligence usage, unevaluated material of every description that may be used in the production of intelligence.

Information requirement - An intelligence requirement of lower priority than the PIR of lowest priority.

Information systems - A term generally applicable to all installations, fabrications, or facilities for originating, transferring, processing, and storing data which may be used for the support and control of military forces or government.

Information systems security - A composite of means to protect telecommunications systems and automated information systems and the information they process.

Intelligence preparation of the battlefield - The systematic, continuous process of analyzing the threat and environment in a specific geographic area. IPB is designed to support the staff estimate and military decision making process. Most intelligence requirements are generated as a result of the IPB process and its interrelation with the decision making process.

Intelligence requirement - A requirement for intelligence to fill a gap in the command's knowledge and understanding of the battlefield or threat forces. Intelligence requirements are designed to reduce the uncertainties associated with successful completion of a specific friendly COA; a change in the COA usually leads to a change in intelligence requirements. Intelligence requirements that support decisions which affect the overall mission accomplishment, such as choice of a COA, branch, or sequel, are designated as PIR. Less important intelligence requirements are designated as IR.

Intelligence support base - Intelligence support base describes the principal organization in a split-based operation from which a deployed commander pulls intelligence. Located in CONUS or at a location outside the AO, the intelligence support base performs collection management; produces and disseminates tailored intelligence products; and maintains accessible intelligence data bases needed to support the deployed commander. It may possess the capability of collecting and processing information on the AO. In most cases, the intelligence support base will provide the follow-on IEW assets which deploy to the AO.

Lines of communication - All the routes (land, water, and air) that connect an operating military force with one or more bases of operations and along which supplies and military forces move. Note that not all roads, or rails are LOCs. Some are unsuited, others may be suitable, but not used. Note also that in this context, a communications center is an area where LOCs converge, such as transshipment points or hub-pattern cities (for example, Bastogne, Belgium).

Latest time information is of value - The time by which information must be delivered to the requestor in order to provide decision makers with timely intelligence. Sometimes the LTIOV is the expected time of a decision anticipated during staff wargaming and planning. If someone other than the decision maker must first process the information, the LTIOV is earlier than the time associated with the DP. The time difference accounts for delays in processing and communicating the final intelligence to the decision maker.

Mission, enemy, troops, terrain and weather, and time available - Used to describe the factors that must be considered during the planning or execution of a tactical operation. Since these factors vary in any given situation, the term "METT-T dependent" is a common way of denoting that the proper approach to a problem in any situation depends on these factors and their interrelationship in that specific situation.

Military Intelligence - A branch of the United States Army.

Named area of interest - The geographical area where information that will satisfy a specific information requirement can be collected. NAI are usually selected to capture indications of threat COAs but also may be related to conditions of the battlefield.

Nuclear, biological, chemical - Used to denote weapons or operations which depend on NBC warheads or agents for their casualty-producing effects; or which protect or defend against or react to their use.

Order of battle - Intelligence pertaining to identification, strength, command structure, and disposition of personnel, units, and equipment of any military force. The order of battle factors form the framework for analyzing military forces and their capabilities, building threat models, and hence developing COA models.

Possible - Information or intelligence reported by only one independent source is classified as "possibly true." The test for independence is certainty that the information report of a source was not derived from some other source, usually resulting in reliance on original reporting. A classification of "possibly true" cannot be based on analytical judgment alone.

Priority intelligence requirement - An intelligence requirement associated with a decision that will affect the overall success of the command's mission. PIR are a subset of intelligence requirements of a higher priority than information requirements. PIR are prioritized among themselves and may change in priority over the course of the operation's conduct.

Probable - Information or intelligence reported by two independent sources is classified as "probably true." The test for independence is certainty that the information report of one source was not derived from the other source, usually resulting in reliance on original reporting. Analytical judgment counts as one source. Ensure that no more than one source is based solely on analytical judgment.

Reconnaissance - A mission undertaken to obtain information by visual observation, or other detection methods, about the activities and resources of an enemy or potential enemy, or about the meteorologic, hydrographic, or geographic characteristics of a particular area. Reconnaissance differs from surveillance primarily in duration of the mission.

Retrograde - An organized movement to the rear or away from the enemy. It may be forced by the enemy or may be made voluntarily. Such movements may be classified as withdrawal, retirement, or delaying operations.

Sequel - Major operations that follow an initial major operation. Plans for sequels are based on the possible outcome—victory, stalemate, or defeat—of the current operation.

Situation template - Depictions of assumed threat dispositions, based on threat doctrine and the effects of the battlefield, if the threat should adopt a particular COA. In effect, they are the doctrinal template depicting a particular operation modified to account for the effects of the battlefield environment and the threat's current situation (training and experience levels, logistic status, losses, dispositions). Normally the situation template depicts threat units two levels of command below the friendly force as well as the expected locations of HVTs. Situation templates use TPLs to indicate movement of forces and the expected flow of the operation. Usually, the situation template depicts a critical point in the COA. Situation templates are one part of a threat COA model. Models may contain more than one situation template.

Specific information requirement - Specific information requirements describe the information required to answer all or part of an intelligence requirement. A complete SIR describes the information required, the location where the required information can be collected, and the time during which it can be collected. Generally, each intelligence requirement generates sets of SIRs.

Specific order or request - The order or request that generates planning and execution of a collection mission or analysis of data base information. SORs sent to subordinate commands are orders. SORs sent to other commands are requests. SORs often use system-specific message formats but also include standard military operations and FRAGOs.

Surveillance - The systematic observation of airspace or surface areas by visual, aural, photographic, or other means. Surveillance differs from reconnaissance primarily in duration of the mission.

Target area of interest - The geographical area where HVTs can be acquired and engaged by friendly forces. Not all target areas of interest (TAIs) will form part of the friendly COA; only TAI associated with HPTs are of interest to the staff. These are identified during staff planning and wargaming. TAIs differ from engagement areas in degree. Engagement areas plan for the use of all available weapons; TAIs might be engaged by a single weapon.

REFERENCES

REQUIRED PUBLICATIONS

Required publications are sources which users must read in order to understand or to comply with this publication.

Field Manual (FM)

100-5	*Operations. 19* **June 1993.**

RELATED PUBLICATIONS

Related publications are sources of additional information. They are not required in order to understand this publication.

Army Regulations (ARs)

34-1	*International Military Rationalization, Standardization, and Interoperability. 15* **February 1989.**
380-5	*Department of the Army Information Security Program. 25* **February 1988.**
381-1	*Security Controls on the Dissemination of Intelligence Information. 12* **February 1990.**
381-10	**US** *Army Intelligence Activities. 1* **July 1984.**
381-20	**US** *Army Counterintelligence Activities. 26* **September 1986.**
381 -47(S)	**US** *Army Offensive Counterespionage Operations* **(U).** *30* **July 1990.**

Field Manuals (FMs)

3-100	*NBC Defense, Chemical, Warfare, Smoke, and Flame Operations. 23* **May 1991.**
6-20-10	*Tactics, Techniques, and Procedures for the Targeting Process. 29* **March 1990.**
24-33	*Communications Techniques: Electronic Counter-Countermeasures. 17* **July 1990.**
31-70	**Basic** *Cold Weather Manual. 12* **April 1968.**
31-71	*Northern Operations. 21* **June 1971.**
34-2	*Collection Management and Synchronization Planning. 8* **March 1994.**
34-2-1	*Tactics, Techniques, and Procedures for Reconnaissance and Surveillance and Intelligence Support to Counterreconnaissance. 19* **June 1991.**
34-3	*Intelligence Analysis. 15* **March 1990.**
34-5(s)	*Human Intelligence and Related Counterintelligence Operations (U). 29* **July 1994.**
34-7	*Intelligence and Electronic Warfare Support to Low-Intensity Conflict Operations. 18* **May 1993.**
34-8	*Combat Commanders Handbook on Intelligence. 28* **September 1992.**
34-10	*Division Intelligence and Electronics Warfare Operations. 25* **November 1986.**
34-1 o-1	*Tactics, Techniques, and Procedures for the Remotely Monitored Battlefield Sensor System (REMBASS), 18* **June 1991.**
34-10-2	*Intelligence and Electronic Warfare (IEW) Equipment Handbook, 13* **July 1993.**
34-25	*Corps Intelligence and Electronic Warfare Operations.* **30 September 1987.**
34-25-1	**Joint Surveillance and Target Attack Radar System. (TBP, September 1994.)**
34-25-2	*Unmanned Aerial Vehicle.* **(TBP, June 1994.)**
34-25-3	*All-Source Analysis System (ASAS) and the Analysis and Control Element (ACE).* **(TBP, June 1995.)**

34-35 *Armored Cavalry Regiment (A CR) and Separate Brigade Intelligence and Electronic Warfare (IEW). 12* **December 1990.**
34-36 *Special Operations Forces Intelligence and Electronic Warfare Operations. 30* **September 1991.**
34-37 *Echelons Above Corps (EAC) Intelligence and Electronic Warfare (IEW) Operations.* **15 January 1991.**
34-40(s) *Electronic Warfare Operations (U). 9* **October 1987.**
34-40-7 *Communications Jamming Handbook. 23* November 1992.
34-40-9 *Direction Finding Operations. 30* November 1984.
34-52 *Intelligence Interrogation. 28* September 1992.
34-54 *Battlefield Technical Intelligence. 5* April 1990.
34-60 *Counterintelligence. 5* February 1990.
34-80 *Brigade and Battalion Intelligence and Electronic Warfare Operations, 15* April 1986.
34-81 *Weather Support for Army Tactical Operations. 31* August 1989.
34-130 *Intelligence Preparation of the Battlefield. 8* July 1994.
71-100 *Division Operations. 16* June 1990.
90-2 *Battlefield Deception, 3* October 1988.
90-2A(S) *Electronic Deception (U). 12* June 1989.
90-3 *Desert Operations. 24* August 1993.
90-5(HTF) *Jungle Operations (How to Fight). 16* August 1982.
90-6 *Mountain Operations. 30* June 1980.
90-1 O(HTF) Military *Operations on Urbanized Terrain (MOUT) (How to Fight). 15* August 1979.
100-1o *Combat Service Support. 18* February 1988
100-15 *Corps Operation. 13* September 1989.
100-16 *Support Operations: Eche/ons Above Corps. 16* April 1985.
100-17 *Mobilization, Deployment, Redeployment, Demobilization. 28* October 1992.
100-25 *Doctrine for Army Special Operations Forces (SF, Rangers, CA, PSYOP, ARSOA). 12* December 1991.
101-5 *Staff Organization and Operations. 25* May 1984.
101-5-1 *Operation/ Terms and Symbois. 21* October 1985.

Technical Bulletin (TB)

380-5(C) *Security, Use, and Dissemination of Sensitive Compartmented Information (SCI) (U).*

Training Circulars (TCs)

34-10-20 *Military Intelligence Combat Assessment Tables (MICAT). 7* May 1993.
34-10 -20-1 Military intelligence Collective Training Standards Document Vo/ume l. 14 December 1992.
34-10 -20-2 Military Intelligence Collective Training Standards Document *Vo/ume //. 14* December 1992.
34-55 Imagery */nte//igence. 3* October 1988.

Joint and Multiservice Publications

Joint Pub 1-02	*DOD Dictionary of Military and Associated Terms.* 1 December 1989.
Joint Pub 2-O	*Joint Doctrine for Intelligence Support to Operations.* 12 October 1993,
Joint Pub 2-01	*Intelligence Tactics, Techniques, and Procedures for Joint Operations. 15* July 1992.
Joint Pub 2-02	*Joint* Tactics, *Techniques, and Procedures for Intelligence Support Crisis* to Operations. February 1993.
Joint Pub 3-O	*Doctrine for Joint Operations.* April 1989.
STANAG 2936	*Intelligence Doctrine, Edition 1,* August **1991.**

INDEX

A

Active Component (AC)
  in support of domestic civil authorities, 6-3
  role in mobilization, 3-2, 3-3
All-Source Analysis System (ASAS), v, 4-15
analysis and control element (ACE), 1-8, 5-6. *See also* intelligence organizations.
  during deployment, 3-6
  functions of, 1-11
area of interest (AI). 4-5. *See also* operations.
  covering width and depth, 1-8
area of operation (AO), 4-10, 6-2. *See also* operations.
  deployment area, 3-7
  establish relationships, 4-5
  in predeployment and deployment stages, 3-5
  interface with, 4-15
  locations outside, 1-6, 1-7
  provide logistics support, 4-13
Army force (ARFOR)
  in support of, 5-1
  provide and assume the duties of, 3-1
Army National Guard (ARNG), iv, 6-4
Army Special Operations Forces (ARSOF), 6-11
  conducting special operations, 6-1
  role of, 6-8
automatic data processing (ADP). *See also* intelligence and electronic warfare.
  advantages of, 3-6
  in processing, 4-15

B

battle damage assessment (BDA), 2-4. *See also* intelligence tasks.
  definition of, 2-15
  in operational and targeting conditions, 2-14
  in real-time analysis, 7-2
battle space, 1-8, 2-18, 7-3
  commander's common picture, 7-4
  role of, 4-5
Battlefield Operating System (BOS), iii, 2-18, 2-22, 3-1, 4-3, 4-4, 4-10, 5-14, 6-1
  as an operational tool, 7-1
  in support of force protection, 2-13
  in support of operations, 5-1, 5-13, 6-8 through 6-10
  limitations of, 1-13, 1-14
  primary features of, 1-11 through 1-13
  training, 1-14, 1-15
  tools used in wargaming, 2-19
battlefield TECHINT, 2-6
broadcast, 1-6, 2-12
  in "push" and "pull" of information, 1-10, 1-11
broadcast dissemination, 1-4
  role of, 1-10

C

close operations, 4-9
  battlefield organization, 4-6
  in support of IEW, 4-1, 4-10
collection management, 2-19, 4-16, 5-6, 5-7, 5-10
  exploiting enemy efforts, 2-5
  in OOTW, 6-2
  supporting the commander's PIR, 3-9
collection plan, 2-11, 5-5, 6-6
  development of, 2-19
  in dispersed battlefield, 6-2
  integrating intelligence requirements, 2-9, 2-15
  MI unit status, 4-12
combat commanders, 3-7, 4-1
combat service support commanders, 4-1
combat service support (CSS) units, 1-15, 2-1, 3-7
combat support commanders, 4-1
combat support units, 4-13
combined operations, 5-1, 6-3
  operations, 5-11, 5-12
  organizations, 5-10, 5-11
  procedures, 5-12
command estimate process, 2-9, 2-17
command and control warfare (C^2W), 2-20, 4-16. *See also* information operations.
  objectives of, 7-2 through 7-7
commander drives intelligence, 1-4
commander's critical information requirement (CCIR), 2-17
communications, 2-5, 2-21, 4-1, 4-17, 5-4, 6-5, 6-8
  emanations practices, 2-22
  in support of IEW, 3-6 through 3-8
  processing and disseminating intelligence, 4-15

communications intelligence (COMINT), 2-5
corps, 1-1, 4-9, 4-10, 5-13
  a bridge to national agencies, 5-6 through 5-8
  IEW and collection assets, 1-12
  role of commander's, 3-1
Corps MI Support Element (CMISE), v, 1-13, 5-6. *See also* intelligence organizations.
  functions of, 5-8
  role in deploying forces, 3-6
counterintelligence (CI), 2-4, 2-5. *See also* intelligence functions.
counterreconnaissance, 2-13, 4-7
counter-reconnaissance, intelligence, surveillance, and target acquisition (C-RISTA), 2-14
course of action (COA), 2-7
  development of, 7-6, 7-7
  identifying events, 2-9
  in decision making process, 2-17 through 2-20
  using the intelligence system, 4-4

D
data base, 4-15, 5-13, 5-14
deception, 2-4 through 2-7, 2-21, 3-8, 7-5
  desert operations, 4-16
  planning force protection, 2-13, 2-14
  retrograde operations, 4-10, 4-11
decision support template (DST), 2-10, 2-11, 2-19
deep operations, 4-9
  in support of IEW, 4-6
Deep Operations Coordination Cell (DOCC), 2-12. *See also* intelligence tasks.
Deployable Intelligence Support Element (DISE), 1-8. *See also* intelligence organizations.
  functions of, 1-6
  mission of, 3-5
  types of tailorable, 3-5
division, 1-11, 4-15, 5-6, 5-13
  aerial resources, 4-9
  force projection operations, 3-1
document exploitation, 2-4, 5-5, 5-7
downlink, 1-6, 1-8, 3-7, 5-11

E
echelons above corps (EAC), 3-7, 4-10
electronic intelligence (ELINT), 2-5
electronic warfare (EW), iii, 4-16
  definition, 2-20
  electronic attack (EA), 2-12, 2-20, 2-21, 4-16
  electronic protection (EP), 2-20, 2-21, 4-16
  electronic warfare officer (EWO), 2-12, 4-16
  electronic warfare support (ES), 2-20, 2-21, 4-16
  functions of, 2-20 through 2-22

F
field artillery intelligence officer, 2-12
fire support element (FSE), 2-12. *See also* intelligence tasks.
fire support officer (FSO), 4-3, 4-17. *See also* intelligence tasks.
  identifying requirements of, 2-12
force projection, 1-1, 1-8, 3-9, 4-5, 4-14
  IEW support, 1-4
  joint operations, 5-1
  operations, 1-2, 1-7, 1-11, 1-15, 2-8, 2-9, 3-1 through 3-3, 3-5
force protection, 2-4, 3-3, 3-9, 6-3
  Army's mission, 2-5
  entry operations, 3-7
  in support of, 2-13, 2-14, 4-1
  obtaining information, 6-5
foreign instrumentation signals intelligence (FISINT), 2-5

G
G2, 1-12, 2-1, 2-2, 2-6, 4-10, 4-16, 6-2, 6-4
  functions of, 2-12 through 2-22, 3-5, 3-9
  IPB process, 2-9
  mission of, 4-2 through 4-5
  processing and disseminating intelligence, 4-15
  responsibilities of, 1-15, 5-6 through 5-8
  synchronization process, 1-5, 2-10, 2-11

H
high-payoff target (HPT), 2-12. *See also* intelligence tasks.
high-value target (HVT), 2-12. *See also* intelligence tasks.
human intelligence (HUMINT), 2-4, 2-5, 4-10, 6-2. *See also* intelligence disciplines.

I
imagery, 3-8, 4-15, 6-2, 6-5, 6-8
  broadcast systems, 1-10
  role of, 2-4

imagery intelligence (IMINT), 2-5, 6-2. *See also* intelligence disciplines.
  role of, 2-4
  systems, 4-17
indications and warnings (I&W), 2-6, 3-2, 3-9. *See also* intelligence tasks.
  in support of, 2-9
  use of, 2-8
information operations
  command and control warfare (C^2W), 7-2, 7-3
  definition, 7-1
  information age, 7-1
  information warfare, 7-2
information requirements (IR), 1-4, 6-6
  entry operations, 3-7
  in support of, 3-9, 6-2
  role of collection manager, 1-5
information warfare. *See also* information operations.
intelligence cycle, 2-15, 2-16
intelligence disciplines
  human intelligence (HUMINT), 2-4
  imagery intelligence (IMINT), 2-4
  measurement and signature intelligence (MASINT), 2-5
  signals intelligence (SIGINT), 2-5
intelligence and electronic warfare (IEW)
  in interagency operations, 5-1 through 5-7
  mission of, 4-1
  operations, 1-1, 1-5, 2-1, 2-2, 3-1 through 3-3, 3-7, 4-3, 4-16 through 4-19, 6-1, 7-2
    battlefield framework, 4-5
    combined, 5-10, 5-11
    defensive, 4-8
    IEW and tenets, 4-4
    intelligence cycle, 2-15
    joint, 5-1
    offensive, 4-6
    peacetime, 3-1
    retrograde, 4-10
    role in, 3-8, 3-9
    split-based, 1-6, 1-7
  role of, 4-7
  support, 1-6 through 1-8
    IEW operations, 1-1 through 1-5, 1-14, 1-15, 2-2, 3-1, 3-3, 3-8, 3-9, 4-1, 4-2, 4-6 through 4-16, 5-10, 5-11, 6-1, 6-3, 6-9 through 6-11, 7-1
intelligence functions
  counterintelligence (CI), 2-5
  technical intelligence (TECHINT), 2-6
intelligence organizations
  analysis and control element (ACE), 1-8, 1-13, 3-6, 5-6
  Corps MI Support Element (CMISE), 1-13, 3-6, 5-6, 5-8
  Deployable Intelligence Support Element (DISE), 1-6, 1-8, 1-13, 3-5
  joint intelligence center, 5-3
  joint task force J2, 5-5
  joint task force JIC, 5-5
  MI brigade, 1-13, 3-6, 5-6, 5-8, 5-11
  MI battalion, 1-7, 4-12
  MI company, 1-13, 4-12
  theater Army ACE, 5-7
  theater Army G2, 5-6
  theater MI brigade, 3-6, 5-6, 5-7
  United States Army Intelligence and Security Command (INSCOM), v, vi, 5-8, 5-10
intelligence preparation of the battlefield (IPB), 2-4, 7-6. *See also* intelligence tasks.
  counter-drug operations, 6-7
  functions of, 2-9, 2-10
  humanitarian assistance, 6-6
  mission analysis, 2-18, 6-1, 6-4
  planning and directing, 2-15
intelligence principles
  broadcast dissemination, 1-10
  commander drives intelligence, 1-4
  intelligence synchronization, 1-5
  split-based operations, 1-6
  tactical tailoring, 1-7
intelligence readiness, 1-16, 5-11
  definition of, 1-2
  force protection operations, 2-9
  peacetime operations, 3-1
  training, 1-15
intelligence requirements, 2-3, 2-11, 3-9, 5-8, 5-10, 5-11
  decision making, 2-19, 3-3
  development of, 2-17
  in support of, 2-9
intelligence synchronization, 1-4
  functions of, 1-5
  intelligence cycle, 2-15
intelligence synchronization matrix, 2-20
  IPB process, 2-10

  - situation development, 2-11
- **intelligence system,** 1-11, 7-2
  - an interagency operation, 5-14
  - commander's role, 1-2, 1-4, 3-1, 4-4
  - covering the battle space and AI, 1-8
  - in peacetime, 1-15
- **intelligence tasks**
  - battle damage assessment (BDA), 2-14
  - definition, 2-7, 2-8
  - perform intelligence preparation of the battlefield (IPB), 2-9
  - perform situation development, 2-10
  - perform target development and support to targeting
  - provide indications and warnings (I&W), 2-8
    - Deep Operations Coordination Cell (DOCC), 2-12
    - field artillery intelligence officer, 2-12
    - fire support element (FSE), 2-12
    - fire support officer (FSO), 2-12
    - high-value target (HVT), 2-12
    - high-payoff target (HPT), 2-12
  - support force protection, 2-13
    - deception, 2-14
    - operations security (OPSEC), 2-14
    - rear area, 2-14
- **interagency operations,** 5-1, 5-12
  - operations, 5-13
  - organizations, 5-13
  - procedures, 5-13, 5-14
- **interrogation,** 2-4, 5-7

J

- **Joint Intelligence Center (JIC),** 1-8, 5-4. *See also* joint operations.
  - in theater, 5-5 through 5-8
- **joint operations,** 5-1, 5-3, 5-4, 5-9, 5-10
  - organizations, 5-1 through 5-8
  - procedures, 5-10
- **Joint Surveillance Target Attack Radar System (Joint STARS),** vi, 4-7
- **joint task force J2,** 5-5. *See also* intelligence organizations.
- **joint task force JIC,** 5-9. *See also* intelligence organizations.
- **joint task force (JTF),** 1-8, 3-7, 5-6, 5-9, 5-10
  - assume the duties of, 3-1
  - forming of JTF-LA, 6-4
  - historical perspective, 6-7
  - joint operations, 5-1

L

- **levels of intelligence,** 2-2
  - operational, 2-3
  - strategic, 2-3
  - tactical, 2-3
- **logistics,** 1-1, 3-9, 4-6, 4-9, 4-12 through 4-14, 6-3
- **long-range surveillance unit (LRSU),** 2-4, 4-9

M

- **maintenance**
  - commander's common picture, 7-2
  - operators, 4-17
  - systems and equipment, 4-13
- **measurement and signature intelligence (MASINT),** 2-4. *See also* intelligence disciplines.
- **MI battalion.** *See also* intelligence organizations.
- **MI brigade,** 5-8. *See also* intelligence organizations.
- **MI commander,** 4-12
  - asset manager, 2-12
  - concept of operation, 4-12
  - mission of, 4-2, 4-3
- **MI company.** *See also* intelligence organizations.
- **mission-based intelligence,** 1-2
- **multidiscipline counterintelligence (MDCI),** v, 2-13, 4-6
  - estimate of, 2-6
  - in conjunction with EW, 2-20
  - in support of deployed force, 1-7
  - in support of force protection, 2-5
  - personnel role in, 2-6, 3-5, 4-10, 6-3

N

- **named area of interest (NAI),** 2-19
- **nuclear, biological, chemical (NBC),** 2-9, 4-19

O

- **operational intelligence,** 3-7, 3-8
  - definition, 2-3
- **operations,** 1-13, 4-9, 5-5, 5-9 through 5-13, 6-1, 6-3, 6-7, 7-1 through 7-7. *See also* intelligence and electronic warfare (IEW).
  - battlefield framework
      - area of interest, 4-5
      - area of operations, 4-5
      - battlefield organization, 4-5
      - battle space, 4-5
  - combat, 4-1

  defensive 4-8
  offensive, 4-6
  retrograde, 4-10
force projection, 1-2, 1-7, 1-11, 2-8, 3-1 through 3-3
operations other than war (OOTW), iii, 2-1, 3-8, 4-3, 5-1
  activities, 6-3 through 6-8
  fundamentals of, 6-1 through 6-3
  restraint used, 7-4
rear area, 2-5, 2-6, 4-5, 4-6
special operations, 6-1
split-based, 4-2. *See also* intelligence and electronic warfare (IEW).
operations security (OPSEC), 2-5, 2-14, 4-6, 4-10, 4-13. *See also* intelligence tasks.
  retrograde operations, 4-10

P
priority intelligence requirements (PIR), 1-5, 1-12 through 1-15, 2-9, 3-7, 4-10, 6-6
  BDA-related, 2-14, 2-15
  collection management in OOTW, 6-2
  collection management process, 3-9
  commander's requirements, 2-16, 2-17
  decision making, 2-19, 2-20

R
rear area operations. *See also* operations.
rear operations, 4-1, 4-9, 4-10
reconnaissance, 2-5, 4-2, 4-7, 4-9, 6-3, 6-6 through 6-9
Reserve Component (RC), 3-2, 3-3, 3-9

S
S2, 1-12, 2-1, 2-2, 2-6, 4-10, 6-2, 6-4
  functions of, 2-12 through 2-22, 3-5, 3-9
  IPB process, 2-9
  mission of, 4-2 through 4-5
  processing and disseminating intelligence, 4-15
responsibilities of, 1-15
synchronization process, 1-5, 2-10, 2-11
scientific and technical intelligence (S&TI), 2-6, 5-7
senior intelligence officer, 4-2, 5-3
signals intelligence (SIGINT), v, 5-8, 6-3, 6-8. *See also* intelligence disciplines.
situation development, 3-7
commander's understanding of the battlefield, 2-10 through 2-13
skip echelon, 1-10, 1-12, 1-13
specific information requirement (SIR), 2-19, 6-2
specific orders and requests (SOR), 1-5
G2 (S2) responsibilities, 4-3
IEW support, 4-12
in situation development, 2-11
strategic, 2-5, 4-13, 4-14, 5-7, 5-8, 6-8
levels of intelligence, 2-2, 2-3
sustainment, 4-3, 4-13
in special environments, 4-17 through 4-19
synchronization matrix, 2-15, 4-12. *See also* intelligence synchronization matrix.

T
tactical, 1-1, 1-7, 1-11, 1-12, 2-2, 2-16, 3-5, 4-11, 4-13, 4-14, 5-6
in special operations, 6-8, 6-9
tactical exploitation of national capabilities (TENCAP), vi, 1-7
broadcast dissemination, 1-10
in IMINT, 2-4
special purpose systems, 4-15
tactical intelligence, 1-1, 1-2, 2-3, 3-7, 3-8, 4-6
tactical tailoring, 3-1, 3-5
in force projection IEW, 1-4, 1-7
tactics, techniques, and procedures (TTP), iii, 1-16
targets, 2-14, 4-8, 4-16, 6-9, 7-4
in target development, 2-12
targeting, 2-12 through 2-15, 2-21, 4-6, 4-8, 7-4, 7-6
broadcast dissemination, 1-10, 1-11
in IMINT, 2-4
target development, 2-8, 2-9, 3-8
deep operations, 4-9
support to targeting, 2-12
technical intelligence (TECHINT), 2-4, 2-6, 2-7. *See also* intelligence functions.
theater, 1-11, 1-12, 2-3, 5-8, 5-13
deployment of follow-on assets, 1-7
developing, planning, and organizing, 5-4
entry operations, 3-7
in deployment, 3-5, 3-6
maintain levels of readiness, 1-2
theater Army ACE, 5-7
theater Army G2, 5-6
theater J2, 5-4
theater JIC, 5-5
theater MI brigade, 3-6, 5-6 through 5-8, 5-11
training, 2-8

in intelligence BOS, 1-14 through 1-16
mission of commander's intelligence team, 4-2, 4-3
TROJAN Special Purpose Intelligence Remote Integrated Terminal (SPIRIT), v, 3-8, 4-15

U

United States Army Reserve (USAR), iv
United States Army Intelligence and Security Command (INSCOM), v, vi, 4-16, 5-8, 5-10. *See also* intelligence organizations.
Unmanned aerial vehicle (UAV), vi, 2-4, 4-7

W

wargame, 2-12, 2-19
in intelligence preparation of the battlefield, 2-9
weather, 2-4, 4-3, 4-19, 5-7

FM 34-1
27 SEPTEMBER 1994

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:

Milton H. Hamilton
MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army
07161

DISTRIBUTION:

Active Army, USAR, and ARNG: To be distributed in accordance with DA Form 12-11E, requirements for FM 34-1, Intelligence and Electronic Warfare Operations (Qty rqr. block no. 1117)

*U.S. GOVERNMENT PRINTING OFFICE:--528-027/20021