Chapter 5

Execution

The Army commander executes major operations to support joint campaigns. He practices operational art requiring the synchronization of the six operational-level operating systems. (Minor differences exist between TRADOC Pam 11-9 and the Universal Joint Task List.)

- Operational movement and maneuver.
- Operational fires.
- Operational protection.
- Operational battle command. (FM 100-5 defines battle command and its impacts.
- Operational intelligence.
- Operational logistics. (TRADOC Pam 11-9 calls this “support.” Joint Pub 4-0 expands the definition of logistics to incorporate health services, engineer services, and current supply, maintenance, and distribution services.)

This functional approach is by no means the only way to look at the roles and responsibilities of the Army operational-level commander. The operational-level commander must successfully accomplish several complex operations that may not be easy to analyze. He should consider the operational-level operating systems as aids to identifying tasks that must be accomplished at the operational level. These systems provide a structure for the discussion in Part Three. They are a catalog of battlefield and support activities that place functions into logical—not procedural—relationships.

OPERATIONAL MOVEMENT AND MANEUVER

Operational movement and maneuver is the disposition of forces to create a decisive impact on the conduct of a campaign or major operation. The commander achieves this decisive impact either by securing the operational advantages of position before battle or by exploiting tactical success to achieve operational results. Simply put, operational movement and maneuver involves positioning the needed Army forces and resources at the critical time and place.

The theater CINC designs, organizes, and conducts campaigns. He sets the tempo and direction for the conduct of operations. He centralizes mobility planning, to include supporting CINC’s plans. His senior commanders consider mobility requirements from initial planning, or prehostilities, through mission accomplishment, or accomplishment of posthostility activities.

The CINC’s theater strategic concept is the framework the senior army commander uses to develop his supporting plan. The essence of the Army commander’s plan is the distribution of his available force to support the CINC’s strategic concept. Operational movement and maneuver produces decisive impact on the campaign or major operation. All other operational-level operating systems seek to maximize the effect of movement and
maneuver. They are synchronized to produce a series of operational maneuvers that provide subordinate commanders with the necessary leverage to gain, retain, or sustain the initiative.

At the operational-level, the scope and complexity of movement and maneuver usually involve joint and multinational operations. Still, scale alone does not make movement or maneuver operational. Rather, operational movement and maneuver creates operational advantage; this can be achieved at various echelons.

**OPERATIONAL MOVEMENT**

Operational movement is the regrouping, deploying, shifting, or moving of service, joint, or multinational operational formations to and within the theater from less threatened or less promising areas to more decisive positions. From the Army commander’s perspective, movement involves forces deployed into his area by the CINC and forces under his control that he moves within his AOR.

**Strategic Deployment**

Strategic deployment, specifically the time-phased arrival of forces in the theater, may be among the most challenging problems at the operational-level. An error in determining the proper sequencing of forces may be difficult, if not possible, to correct. The Army operational-level commander must ensure the correct mix of combat and support forces are sequenced to arrive in the theater to support the CINC’s concept. He does this by influencing the development of the time-phased force deployment list (TPFDL) to ensure Army units and sustainment are sequenced into his operational area to support the planned sequence of operations. Forces required for port opening, reception, and onward movement must be sequenced early in the TPFDL to flow into the AO once the lodgment area is established.

The senior army commander is responsible for moving forces allocated by the CINC from ports of debarkation to specific locations within the Army’s objective area. This responsibility includes the actual relocation or movement of operational forces by any means or mode of transportation. Prior to deploying the forces into combat formation, the senior army commander directs movement from positions within the operational area to a forward staging area or position.

**Ground Combat Operations**

Ground combat operations require coordinated movement and effective concentration of combat power against the enemy in spite of enemy interdiction efforts. Air defense, air and ground transportation, reconnaissance and security, service support, and traffic control are among the chief concerns as these large movements occur. Ground combat operations have the best chance of success when they are synchronized with air superiority and air interdiction operations. Senior army commanders direct the movement of subordinate forces, ensuring that by the end of a distinct phase of the major operation, forces are positioned in a way that enables rapid transition to subsequent phases.

**OPERATIONAL MANEUVER**

Maneuver is the means by which combat power is concentrated at the critical point to achieve the surprise, shock, momentum, and dominance that enable smaller forces to defeat larger ones. Operational maneuver is the means by which the commander sets the terms of battle, declines battle, or acts to take advantage of tactical actions. Throughout a combat operations area, attack, defense, and retrograde operations often take place simultaneously as each combatant attempts to mass, economize locally, and maneuver against his opponent.

**Maneuver Operations**

Prior to the conduct of offensive, defensive, or retrograde operations, senior army commanders, in conjunction with the JFC, posture their operational forces to influence the enemy. As the army commander postures his forces, he visualizes the depth of the campaign. Although initial deployment is important, army commanders posture for initial and subsequent operations, based upon their visualization of the operational end state.

**Offensive Operations**

The offensive is the decisive form of war and must be exercised in a coherent and cohesive manner. The key to success in an offensive operation is to defeat, destroy, or neutralize the enemy force. Offensive operations seek—

- To secure decisive terrain.
- To deprive the enemy of resources.
- To gain information.
- To deceive, divert, and hold the enemy in position.
•To disrupt the enemy’s attack.
•To set up the conditions for future operations.

The goal is to mass effects, and not necessarily our forces, as we pursue offensive operations.

At the operational level, offensive operations may be directed against an element of the field force—the mass of enemy forces, the boundary between two of its major combat formations, a vital C2 center, a logistical base, or LOCs. It also could be more abstract—the cohesion among allied forces, for example, or the mental and psychological balance of a key enemy commander. Operational-level commanders execute offensive maneuver simultaneously through operational envelopments, turning movements, infiltrations, penetrations, and frontal attacks—all of which must be integrated with air operations throughout the depth of their battle space to ensure the best chance for success.

Defensive Operations

Army leaders conduct defensive operations to defeat an enemy attack, gain time, concentrate forces elsewhere, control key terrain, wear down enemy forces as a prelude to offensive operations, or retain operational objectives. The defender must counter the attacker’s initiative. At the operational-level, the defender may disrupt the enemy attack with spoiling, special deception, psychological, and interdiction operations. A successful defense has reactive and offensive air and ground elements working closely together to deprive the enemy of the initiative.

Army forces may either conduct a mobile defense that focuses on the destruction of the attacking force or an area defense that focuses on the retention of terrain. The mobile defense orients on the destruction of the enemy force by employing a combination of fire, maneuver, offense, defense, and delay to defeat its attack. The area defense absorbs the enemy into an interlocked series of positions from which the army commander destroys the enemy largely by fires.

Senior army commanders normally hold operational reserves in depth to seize the operational initiative during a defensive operation. These reserves may include dedicated forces, designated operating forces, generated forces from reconstitution, or incoming newly arrived forces.

Retrograde Operations

Retrograde operations are movements to the rear or away from the enemy. They gain time, preserve forces, avoid combat under undesirable conditions, or draw the enemy into an unfavorable position. Control of the airspace is the key to their success. The underlying reasons for retrograde operations are to improve an operational situation or prevent a worse one from occurring.

Peacetime Stationing Requirements

The CINC addresses peacetime stationing requirements in light of his potential warfighting needs and availability of forward-deployed forces. The ASCC controls trained and ready Army forces based overseas for CINC employment. Those forces are backed by rapid reinforcement by Army forces from the US or from other theaters. An evident mobilization capability and a demonstrated determination to respond effectively to crises can have significant deterrent value.

MOBILITY AND COUNTERMOBILITY

Operational mobility is linked closely to the concept of movement and maneuver. Operational movement and maneuver include the functions of providing mobility for operational forces and countering the mobility of enemy operational forces.

Facilitating maneuver of major formations without delays includes counteracting the effects of operationally significant obstacles. It also includes enhancing operational movement by preparing and improving facilities and routes critical to major operations.

Operational counter-mobility delays or otherwise hinders the movement of enemy operational formations, to include selecting and emplacing systems of obstacles for operational effect.

Terrain, both natural and man-made, significantly influences operational mobility. Terrain consists of coastal plains, mountain ranges, forests, jungles, deserts, rivers, river deltas, built-up areas, railroad embankments, pipelines, and so forth. Terrain affects the ability to sustain forces, often dictating the capacity of LOCs. This effect, in turn, can limit the size and composition of supported forces. In war, the operational-level commander considers the effect of terrain features upon ground movement and the ability of air power
to influence that movement by detecting ground forces and subsequently delaying, disrupting, and destroying the forces. In peacetime, the army commander may consider how these features affect accomplishment of missions supporting peacekeeping or humanitarian operations.

The commander must consider the effects of weather and be cognizant of its effects in the theater. Key terrain considerations for the operational-level commander are linked to an understanding of battle space. The commander seeks to preserve freedom of operational movement by countering the effects of natural or man-made, operationally significant obstacles. He must be prepared to counter enemy movements by delaying, channeling, or blocking operational formations. The commander achieves this through the use of countermobility.

**OPERATIONAL FIRES**

The term *operational fires* refers to a commander’s application of nonlethal and lethal firepower to achieve a decisive impact on the conduct of a campaign or major operation. Operational fires are a separate element of the commander’s concept of operations (addressed separately from maneuver) but must be closely integrated and synchronized with the commander’s concept of maneuver. Operational fires are joint, and potentially multinational, activities and are a vital component of any operational plan.

Operational maneuver and operational fires may occur simultaneously within a commander’s battle space but may have very different objectives. In general terms, operational fires are *not* fire support, and operational maneuver is not necessarily dependent on operational fires. However, operational maneuver can be affected by such fires and can exploit opportunities created or developed by the JFC’s operational firepower (Joint Pub 3-09). Operational fires are normally furnished by assets other than those required for the routine support of tactical maneuver. However, as the range of assets used to support tactical maneuver increases, those same assets will play a more significant role in the delivery of operational fires. The Army has significant capabilities for contributing to the joint, deep fight or planning and conducting its own deep operations, when necessary, using operational maneuver and/or organic operational fires.

Operational fires include targeting and attacking land and sea targets whose destruction or neutralization would have a significant impact on a campaign or major operation. Operational fires include the allocation of joint and multinational air, land, sea, and space means. In a war involving weapons of mass destruction (WMD), fires could become the predominant operational instrument.

A synchronized, systematic, and persistent plan of attack among air and land and, when applicable, sea and space commanders is essential. Air superiority enables the ARFOR to execute operations without interference from enemy air forces and maintains tactical flexibility. Air component missions that contribute most directly to land operations are counterair, close air support (CAS), air interdiction, special operations, airlift, and surveillance and reconnaissance. An example is air interdiction operations flown against an enemy heavy division maneuvering to counterattack friendly forces during friendly offensive operations. The land forces contribute to air operations by fire—suppression of enemy air defenses (SEAD), land-based air defense, ground defense of air bases—and by maneuver through attack helicopter operations or seizure of air bases and air defense sites by ground forces.

**THEATER AIR CONTROL SYSTEM**

The supported CINC must effectively employ the air capabilities provided by the assigned or supporting service or functional component forces within his AOR. Each component within the unified command structure may conduct a variety of air operations in the CINC’s AOR. Additionally, supporting CINCs may also fly missions to support the supported CINC’s objectives. The supported CINC must integrate assigned and supporting forces into his theaterwide air operations and ensure component direct support air operations are coordinated with his theaterwide operations. The A C process
integrates the maneuver of Army aviation into the overall scheme of maneuver. Users of Army airspace achieve operational influence through the synchronization of air maneuver, using all battlefield operating systems focused throughout the depth of the AO. All Army airspace users fire and maneuver within the third dimension of the ground commander’s AO. The A2C2 process is used to synchronize these Army assets in the area above the ground commander’s AO.

To ensure this integration, the CINC may choose to establish a functional component—the JFACC. This responsibility is normally assigned to the service that has the preponderance of air assets and the best capability to command and control joint air operations. Responsibilities of the JFACC are described in Joint Pubs 3-01.2 and 3-56.1. If the JFACC is not established, the air component commander (ACC) is responsible for providing fixed-wing tactical air support to United States Army (USA) forces. Circumstances may require that the US Navy (USN) or US Marine Corps (USMC) provide all or part of the tactical air support for the ARFOR. Under such circumstances, the Naval component commander is responsible for providing the tactical air support. FM 100-103-1 describes multiservice tactics, techniques and procedures for integrating airspace C in a CZ. Figure 5-1 describes a notional C2 structure for integration and coordination of joint fires.

The theater air control system (TACS) is not a formal system in itself but the actual sum of various component air-ground systems. The TACS includes the organizations, personnel, equipment, procedures, and techniques comprising the Army Air-Ground System.
(AAGS) and the Air Force component commander’s (AFCC’s) TACS-related responsibilities and missions. The AAGS is the system necessary for providing the land component commander or ARFOR with the means for receiving, processing, and forwarding the requests of subordinate commands for air support missions and for the rapid dissemination of information and intelligence produced by air means.

TACS provides the same type of system for the AFCC. A similar system exists within the USN and provides the USN-USMC naval aviation C2 system for naval aviation. FM 31-12 contains a detailed discussion of the USN-USMC C2 system and the additional agencies included therein. Although components and agencies of the TACS belong to different services and sometimes to different nations, they function as a single entity in planning, coordinating, and integrating air support operations with ground operations.

The AAGS begins at the highest echelon in the theater and extends through all echelons down to maneuver battalions. This system is used for coordinating and integrating tactical air support with ARFOR ground operations. The AAGS is composed of operations, fire support, air defense, Army airspace C2, and liaison elements. Each Army component of the system is designed to operate with an element of the US Air Force (USAF) TACS but is also compatible with both USN and USMC air control systems. Figure 5-2 illustrates the components of a typical TACS and the locations of the liaison elements within the AFCC.

OTHER SYSTEMS

Technology is improving extended-range acquisition and attack systems such as the multiple launch rocket system (MLRS), the Army tactical missile system (ATACMS), and the Apache attack helicopter. These systems allow the Army to extend battle space and play a larger role in decisive deep operations.

Senior army commanders must orchestrate available Army, joint, and multinational lethal delivery systems to disrupt, delay, destroy, or degrade enemy operational forces or critical functions and facilities. They must ensure that systems designed to impair, disrupt, or delay the performance of enemy operational forces, functions, and facilities are coordinated with fires. The extended range and flexibility of attack helicopters and fire support systems make it possible to shift the focus and concentration of fires rapidly over the width and depth of the operational commander’s battle space. EW, PSYOP, special reconnaissance, and SOF must be synchronized with operational fires in war, or they may be used by themselves in MOOTW.

PLANNING

In the past, theater air forces have provided operational fires; however, the increasing range and accuracy of projectile, rocket, and missile systems, combined with maneuver and attack capabilities from attack helicopters and light forces, now provide the Army commander with his own organic operational-fires capability. The ability of each service to engage targets at operational depths demonstrates the inherent joint and potentially combined nature of operational fires.

The senior army commander, in supporting the CINC’s campaign plan, plans operational fires within his AO. His major role is to synchronize ground and air operational fires in his AO to achieve operational and tactical objectives. The army commander applies operational fires in depth to achieve operational objectives quickly with minimum casualties.

The army commander plans operational fires from the top down (the operational commander establishes objectives and designates and integrates targets, then passes them to the subordinate joint or allied units for execution). The Army commander executes those fires with organic and allocated assets and by nominating targets that he cannot strike with these assets to the JTCB. He uses the targeting process to shape the battle space and synchronize fire support, interdiction, and maneuver. He does this using the decide, detect, deliver, and assess (D3A) methodology and participating in the JFC’s joint targeting process.

The D3A methodology enables commanders to respond rapidly with synchronized operations to events vital to establishing favorable conditions for mission accomplishment. The D3A methodology is a process that helps a commander’s structured attack of critical targets and creates a favorable battle tempo for friendly forces, particularly at decisive points and times during the operation.
Figure 5.2. Theater Air Control System

NOTE: Intention is not to show command relationships, but the information flow and complexity of the TACS process.
This methodology requires extensive lateral and horizontal coordination, which the staff does, based on the commander’s intent. In planning operational fires, both ground and air component commanders consider the effects that all fires, especially scatterable mines and cluster-type munitions, may have on future ground operations. FMs 101-5 and 6-20-10 discuss the targeting process in detail.

Commanders concentrate the effects of their fires rather than massing the weapons themselves. Extended-range acquisition and attack systems allow the commander to reduce the vulnerability of his forces by dispersing the friendly forces and massing effects on the enemy. However, fires alone are unlikely to achieve completely operational objectives. Integrated properly with operational maneuver, fires can help achieve a decisive impact on the operation.

**GENERAL TASKS**

Operational fires help the Army commander accomplish his mission and protect the force. Operational fires achieve both operational and tactical objectives while holding enemy critical functions at risk throughout the depth of the battle space. Operational fires are more than deep fires. They achieve operational objectives by extending the battlefield in both space and time. Targets critical to the success of friendly operations exist throughout the depth of the battlefield. Current and emerging capabilities permit their acquisition and attack at increasing ranges and with faster response times. Operational fires expose or attack enemy centers of gravity. Attack of key operational targets helps to set the conditions for operational maneuver. Disrupting, delaying, or limiting critical enemy functions helps the commander dictate the terms for the close fight. Operational fires may hold or deny terrain in support of both operational and tactical objectives.

Tactical objectives are supported by the ability of operational fires to disrupt, delay, or limit enemy capabilities that would impact immediately on the current battle. Tactical objectives support the attack of committed enemy formations throughout their depth. This support helps the commander seize and retain the initiative, alter the tempo of operations, and set the conditions for decisive close combat.

Support of both operational and tactical objectives through operational fires is based on the ability of operational fires to hold all critical enemy functions at risk throughout the depth of the battle space. Operational fires neither leave the enemy a place to hide nor time to rest, critically limiting his freedom of action. As such, operational fires hasten the physical destruction of the enemy force and the disintegration of cohesive operations and demoralize the enemy’s will to fight. In MOOTW, the availability of operational fires to the commander acts as a deterrent to escalation of conflict and, when necessary, provides him additional means to accomplish the mission and protect the force.

Also, the enemy may possess a sophisticated operational fires capability. The Army commander must consider enemy capabilities and establish measures to protect the force. Operational fires may be used to disrupt enemy capabilities before they can be used against friendly forces. Examples include theater missile defense, counterreconnaissance, surveillance and target acquisition, counterfire, and joint suppression of enemy air defenses (J-SEAD). Operational fires focus largely on one or more of three general tasks: facilitating maneuver, isolating the battlefield, or destroying critical enemy functions and facilities.

**Facilitating Maneuver**

Operational fires can facilitate maneuver in depth by suppressing the enemy’s deep-strike systems, disrupting the enemy’s operational maneuver and tempo, and creating exploitable gaps in tactical defenses. Interdiction and
manner are inseparable operations against a common enemy. *Interdiction* directs, disrupts, delays, or destroys the enemy’s surface military potential before it can be used effectively against friendly forces (Joint Pub 1-02). Effective interdiction and maneuver are complementary operations designed to achieve the JFC’s campaign objectives. Together they present the greatest dilemma to the enemy. The synergy achieved by integrating and synchronizing interdiction and maneuver assists commanders in optimizing leverage at the operational level.

When the campaign calls for ground operations to be decisive operations or defeat mechanisms, planning for the interdiction operations and target prioritization must be based on the ground commander’s concept of operations. Just as air commanders (Naval and Air Force) know and understand the capabilities, strengths, and weaknesses of opposing air forces, ground force commanders must know and understand the capabilities, strengths, and weaknesses of opposing ground forces.

Proper interdiction planning requires both air and ground expertise. The interdiction and maneuver planning responsibilities of the operational-level commander fall into two areas: influencing joint air interdiction operations and ensuring that ARFOR and JFLCC target nominations are struck according to available assets. To ensure integration of interdiction and maneuver, the Army operational-level commander must—

- Define Army interdiction objectives and priorities and provide them to the JFACC.
- Establish allocation of CAS effort between subordinate Army forces and the operational headquarters.
- Ensure the deep operations coordination cell (DOCC) determines high-payoff and high-value targets.
- Ensure that consolidated target, nominations reflect ARFOR priorities.
- Recognize that Army targets do not automatically get higher priority.
- Facilitate notification to subordinate unit commanders when the JFC determines that the circumstances have changed and therefore alter asset allocation priorities.
- If designated as an appropriate ground forces commander, establish a fire support coordination line (FSCL) within boundaries and in consultation with superior, subordinate, supporting, and affected commanders.

### Isolating the Battlefield

Isolating the battlefield is another major task of operational fires. Operational-level commanders isolate the battlefield by interdicting enemy military potential before it can be used effectively against friendly forces. Commanders usually combine this isolation with other operations in a simultaneous attack designed to use superior combat power to achieve quick, decisive outcomes.

While interdiction destroys enemy forces, its primary contribution to the operation is curtailing the enemy’s freedom of movement and information flow and influencing the enemy’s battle tempo by diverting, delaying, and disrupting enemy forces. Interdiction can slow the action of enemy reserves and obstruct the redeployment or movement of forces.

Interdiction of the logistical support system disrupts enemy operations by choking off the enemy’s combat power. Friendly ground and air forces must exploit the enemy’s reduced freedom to maneuver and synchronize this reduction with other operations to achieve the desired tempo of operations.

### Destroying Critical Enemy Functions and Facilities

Operational-level commanders may use operational fires to destroy critical enemy functions and facilities. Critical targets may include high-value C2 systems, mobility assets such as fixed and mobile bridging, air defense sites, and enemy long-range delivery systems such as surface-to-surface missiles, theater ballistic and cruise missiles, airfields, and aircraft.

The objective in such cases is the deliberate elimination or substantial degradation of critical enemy operational capabilities, for example, attaining air superiority by destroying enemy air operations and air defense capabilities. Operational fires do not necessarily depend on other concurrent operations for success; however, they may be employed with other systems and maneuver in a simultaneous attack of enemy operational capabilities. Operational fires are particularly attractive in a theater where lack of resources may preclude major ground offensive operations.
**ORGANIZATION**

The senior army commander ensures unity of effort and purpose by organizing fires in his operational battle space. He is a major planner of operational fires and a major allocator of fire support resources. He closely coordinates joint and multinational assets. He allocates or controls resources and designates missions to subordinates. They attach forces, establish support relationships, or control usage; specify the degree of risk; and retain systems control. A primary consideration for the Army commander is the allocation of scarce operational fires resources, especially air assets.

**COORDINATION**

The senior army commander and his staff play a major part in coordinating joint and multinational assets. Under the guidance of the JFC, land, air, and maritime components execute major operations designed to attain strategic objectives. The JFC synchronizes operational-level fires as part of the joint planning process. This process entails component coordination and cooperation in the employment of all fires.

**Deep Operations Coordination Cell**

The DOCC is a proposed fire support cell at the operational-level headquarters that plans, coordinates, and executes employment of operational fires. Chapter 7 discusses the DOCC in detail. J-SEAD is an example of this type of coordination and cooperation.

**Battlefield Coordination Element**

The Army DOCC effects coordination with other services through the battlefield coordination element (BCE). The ASCC provides the BCE and collocates it either ashore or afloat with the ACC’s air operations center (AOC) or theater equivalent. The BCE expedites the exchange of information through face-to-face coordination with elements of the AOC established by the ACC. The AOC is the operational facility in which the ACC centralizes the planning, direction, and controlling functions over all tactical air (TACAIR) resources.

The BCE’s basic mission is to facilitate the synchronization of air support for Army operations. The BCE is responsible to the ASCC/ARFOR commander and coordinates with and receives objectives, guidance, and priorities from his operations officer (G3). Specific missions include processing land forces’ requests for TACAIR support, monitoring and interpreting the land battle situation for the AOC, providing the necessary interface for the exchange of current intelligence and operational data, and coordinating air defense and airspace control matters.

Historically, the BCE has worked with the Air Force in this coordination role, but with the changes in world environment and joint doctrine, the Army BCE can expect to work in contingency operations with USMC and maritime air component commanders. Planners must identify and resolve problems that result from these less-practiced and less-refined linkages. If the BCE collocates with an AOC, it is organized into sections corresponding to the AOC’s functions. Figure 5-3 illustrates the organization of the BCE and its interface with tactical air control. For more information on the BCE, consult FM 100-103, FM 100-15, and 71-100 series FMs.

**OPERATIONAL**

Operational protection conserves the fighting potential of a force so that it can be applied at the decisive time and place. Operational protection includes actions taken to counter the enemy’s firepower and maneuver by making soldiers, systems, and operational formations difficult to detect, strike, and destroy. Operational protection pertains to forces everywhere in the theater of war or operations. Operational protection includes, but is not limited to:

- Providing operational air defense.
- Conducting deception.
- Protecting operational forces and means.

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1. To accomplish this mission, the 3d US Army formed a deep operations targeting cell during Operations Desert Shield and Desert Storm.
• Employing OPSEC.
• Providing security for forces and means.
• Conducting rear operations, which includes combatting terrorism.
• Conducting risk assessments.
• Planning for possible response or use of WMD.

PROVIDING OPERATIONAL AIR DEFENSE

All members of the combined arms team perform air defense operations; however, ground-based air defense artillery (ADA) units execute the bulk of the force protection mission. Army ADA provides protection to forces and selected geopolitical assets from aerial attack, missile attack, and surveillance. Significant considerations for employment of ADA in theater operations include its role in joint and multinational counterair operations, theater missile defense, the threat, available assets, and organizations.

Air Threats

The entire spectrum of threat air operations can be flown with theater-level assets. Enemy air operations may include tactical ballistic missile (TBM), air-to-surface missile (ASM), and cruise missile (CM) attacks. The full spectrum of enemy air threat includes UAVs, rotary- and fixed-wing aircraft, and airborne and air assault operations. The current approach to theater missile and air defense places emphasis on leveraging the synergy of joint capabilities to the maximum extent possible to counter the threat. Each joint force component addresses the target sets that they are best equipped to engage and destroy.

The first target set is ballistic missiles. Ballistic missiles can be strategic, operational, or tactical. They may also have guided munitions. Because of detection difficulties and inadequate kill potential, manned aircraft are inappropriate platforms to counter TBMs in the terminal phase. The TBM target set is best engaged by ground-based systems as demonstrated by Patriot ADA during Operation Desert Storm. Manned aircraft are best suited by design for air-to-air engagements of other manned fixed-wing aircraft.

A second target set committed against theater assets is cruise missiles. UAVs, and fighter/bomber aircraft that evade the defense
counterair operations of the joint air forces. Ground-based air defense systems are best equipped to engage these targets. UAVs and helicopter platforms typically operate at altitudes where fixed wing air-to-air combat is not employed. These targets are destroyed through ground-based systems, thereby contributing to protection of forces and geopolitical assets and denying the enemy surveillance of friendly force activities.

The contribution of all services to theater missile and air defense offensive and defensive tactics engages all applicable target sets. These offensive and defensive tactics cover all aspects of active and passive defense measures throughout the theater.

**Joint and Multinational Counterair Operations**

Joint and multinational counterair operations are conducted to attain and maintain a desired degree of air superiority by destroying or neutralizing enemy forces. Joint and multinational counterair operations include both offensive and defensive measures taken against enemy air threats. Offensive counterair (OCA) operations destroy, disrupt, or limit enemy air threats as close to their source as possible, whereas defensive counterair (DCA) operations are conducted primarily to counteract enemy air offensive actions to nullify or reduce the effectiveness of hostile air attacks.

Air defense forces conduct DCA operations using both active and passive measures. Active DCA operations use ADA; EW; Army aviation; and chemical (smoke), combined arms, and air elements to disrupt or destroy airborne enemy aircraft, missiles, and other aerial vehicles that pose attack and surveillance threats. Passive DCA measures such as cover, concealment, signature reduction, smoke operations, and deception frustrate enemy targeting efforts and minimize the effects of enemy attacks.

**Theater Missile Defense**

FM 44-100 states that the objectives of theater missile defense (TMD) are—

- To detect, warn of, and report theater missile launch.
- To coordinate a multifaceted response to a theater missile attack.
- To integrate TMD with other combat operations.

TMD has four operational elements—passive defense, active defense, attack operations, and command, control, communications, computers, and intelligence (C4I). The Army contributes to all four. Passive measures reduce the vulnerability of critical forces and assets to theater missile attack. Active defenses engage missiles and enemy aircraft armed with air-to-surface missiles in flight. Attack operations are conducted to prevent the launch of theater missiles. C4I is required to coordinate and integrate the defense against the theater missile capability.

The senior Army air defense command in theater executes a key portion of the TMD concept. Air defense forces are task-organized to defend a TMD task force. The TMD task force protects a mix of force organizations and geopolitical assets that represent a high priority for protection by the TMD. It is composed of two overlapping tiers. The upper tier is defended by theater high-altitude air defense (THAAD). The lower tier is defended by the Patriot. Through TMD, both OCA and DCA actions are taken against theater missiles. Simultaneous with the active defense operations to destroy inbound theater missiles are the attack operations to facilitate counterfires using the flight data of the threat TBM to locate the launch point. This is an operational action that can extend air defense activities far beyond the corps deep battle area. For additional details on TMD, refer to FM 44-100.

**CONDUCTING DECEPTION**

The conduct of deception contributes greatly to the protection and survivability of operational forces. Operational deception consists of those operations that purposely mislead enemy decision makers by distorting, concealing, and falsifying friendly intentions, capabilities, and dispositions. Deception includes protecting the commander’s own intentions, disseminating misinformation to deceive the enemy about those intentions, obscuring areas of the theater, and determining the effect of the deception.
The ultimate goal of deception is to mislead the opposing military commander, prompting him to plan and conduct his activities in a manner that unwittingly serves the friendly force’s objectives. Deception operations are planned and executed at the operational level of war and synchronized with strategic objectives. They can support theater objectives by deterring the escalation of conflict, destroying the enemy’s warfighting means, gaining and maintaining the initiative, and shaping the enemy’s scheme of maneuver.

The operational-level commander participates in the deception process at two levels. He may plan and execute deception operations within his mission purview, or he may be asked to provide planning and operational-level support for deception activities planned and executed by subordinate, adjacent, or higher command echelons. Deception operations at the operational level must complement or reinforce the theater deception plan effort. The operational-level commander reconciles operational and tactical deception plans to ensure they complement but do not contradict the strategic (theater) plan.

**PROTECTING OPERATIONAL FORCES AND MEANS**

The operational-level commander safeguards his operational force by reducing the effects of enemy operational-level actions (movement, radio electronic combat, and so forth). He does this by preparing operationally significant fortifications, removing operationally significant hazards, and protecting the use of the electromagnetic spectrum.

The operational commander provides protective construction hardening for operational forces and key facilities, for example, C3, logistics, and rear area positions. However, even hardened facilities are vulnerable to a determined attack. The operational commander eliminates hazards that may adversely affect the execution of his plan. Additionally, he ensures that actions are taken to ensure friendly, effective use of the electromagnetic spectrum, despite the enemy’s use of EW.

**EMPLOYING OPERATIONS SECURITY**

The operational-level commander attempts to hide friendly force indicators associated with planning and conducting major operations. He does so by employing signal security (SIGSEC) and concealment techniques and avoiding operational patterns.

The operational-level commander protects emitters and information transmitted through friendly C3 communications-electronic systems from enemy exploitation. He also hides operational forces and facilities from enemy observation and surveillance sensors. He ensures units vary activities and ways of conducting operations to avoid predictable patterns that are vulnerable to enemy interception.

**PROVIDING SECURITY OF FORCES AND MEANS**

By identifying and reducing friendly vulnerability to hostile acts, influence, or surprise, the operational-level commander enhances the force’s freedom of action. Enhancement consists of measures to protect the force from surprise, observation, detection, interference, espionage, and sabotage. It includes protecting and securing the flanks of operational formations, critical installations, facilities, and systems.

**CONDUCTING REAR OPERATIONS**

The operational-level commander is responsible for rear operations subject to applicable host nation laws and agreements. Rear operations include those activities that allow freedom of maneuver in the COMMZ, continuity of sustainment, and uninterrupted battle command. The combatant CINC is ultimately responsible for all rear operations in the theater of operations. He normally assigns subordinate commanders the responsibility for operations in a JRA according to mission requirements, force capabilities, the strategic environment, and the threat. The CINC may assign the overall mission of rear operations to one commander—the JRAC. The JRAC must ensure integration of all rear operations missions and forces and synchronization with the CINC campaign plan.

The potential magnitude of the threat to the theater base and COMMZ dictates that US forces be trained to cope with threat forces when and where they attempt to interrupt COMMZ operations. The operational-level commander uses every appropriate active and passive measure for defense against detection.
from the air, attack from the ground, and compromise of friendly defense systems.

Successful rear security operations are critical in the rear area since it contains the LOCs, establishments for supply and evacuation, and agencies required for immediate support and maintenance of field forces. The key tasks of successful rear security operations are—

- Coordinating base/base cluster defense plans.
- Collecting, integrating, analyzing, and disseminating timely and accurate intelligence.
- Patrolling aggressively in coordination with the host nation, to intercept and defeat small threat forces before they close on their objective.
- Deploying forces sufficient to counter the enemy intrusion.

CONDUCTING RISK ASSESSMENTS

Also integral to force protection is the conduct of risk assessments. Risk assessments identify hazards and examine the resulting risks associated with the mission. Special risk considerations must be made where the threat of WMD exists. Risk assessment is dynamic. As circumstances change and the command’s experience level increases, risk assessments confirm and reconfirm critical information that affects decisions.

PLANNING FOR POSSIBLE RESPONSE OR USE OF WEAPONS OF MASS DESTRUCTION

US policy concerning nuclear warfare is to deter it, and, if deterrence fails, to terminate the conflict at the lowest possible level of violence consistent with national and allied policy objectives. This policy does not preclude US first use of nuclear munitions. Nuclear weapons may only be used following the specific directives of the President.

Since the Army no longer has an organic nuclear capability, it must rely on other services for delivery of nonstrategic nuclear weapons to support its operational warfare requirements. Nuclear weapons should be integrated with other fire support systems to achieve the greatest operational advantage.

The potential employment of WMD can have an enormous impact on the conduct of all operations. These strategic, operational, psychological, and political impacts affect campaign designs. The sheer killing and destructive power of these weapons create an illusionary battlefield effect. Further, the proliferation of WMD dramatically alters the nature of regional conflict.

As these weapons proliferate, the likelihood of their use against friendly forces or in response to an enemy’s first use increases. The effects of these weapons on a campaign or major operation—either through use or the threat of use—can cause large-scale shifts in tactical objectives, phases, and/or COAs. Thus, planning for the possibility of their use against friendly forces is critical to campaign design. Commanders must be aware of the political as well as public sensitivities to the use of WMD and be prepared to respond to the possibilities of postuse public relations problems.

From the combatant commander’s perspective, a swift end to a conflict will partially negate the escalator potential of these weapons. A combination of conventional offensive and defensive measures can help deter or reduce the likelihood of an enemy’s use of these weapons. Offensive preventive measures may include raids, surgical air strikes, and operations designed to locate and neutralize the threat of such weapons. Commanders implement the defensive nuclear, biological, chemical (NBC) principles of avoidance, protection, and decontamination. They also plan for effective air and ballistic missile defense with different systems. US military policy attempts to deter enemy use of WMD through a defense posture that allows US forces to survive, fight, and win under conditions produced by these weapons.

Commanders must assess an enemy’s willingness to employ these weapons and the conditions that would prompt him to do so. However, commanders should never assume rationality in the mind of the enemy. A virtually defeated enemy may resort to unrestricted warfare by any means at hand.

Army forces may support use of WMD with SEAD or with the reconnaissance and selection of targets. More importantly, however, Army officers must participate in drafting and executing campaign plans that envision friendly use of WMD. The campaign plan must identify the requirement for strikes with WMD.
that support campaigns and major operations. Additionally, Army planners should identify appropriate WMD targets and ensure integration of WMD into the campaign plan and/or major operation plan.

The Mass Destruction Environment

When WMD are used, extensive destruction and mass casualties can result. Only cohesive, disciplined, physically fit, and well-trained units can function in this environment. But long-term operations in this environment degrade even the best individual and unit performance as a result of wearing protective equipment. Commanders must train and equip soldiers and civilians alike to endure these conditions. By being better prepared than the enemy for continuous operations under conditions produced by WMD, US forces can maintain an advantage over the enemy that deters him from using these weapons.

Force protection is an imperative in this environment. Units can survive the use of WMD by anticipating their employment. Commanders can protect their forces in a variety of ways. These include training, OPSEC, dispersion of forces, and proper use of terrain for shielding against effects.

In an NBC environment, battle command becomes more difficult. Command posts and headquarters at all levels are likely targets. Control is difficult even within the smallest unit. Personnel in protective clothing are slow to respond to rapid changes in mission. The employment of these weapons greatly alters the tempo of combat. So, commanders must never assume that they are immune to attack but consider ways of decreasing their risk.

Contamination avoidance is essential for successful operation when faced with an NBC threat. Avoiding contamination allows units to maintain tactical momentum and preserves combat power by keeping soldiers out of increased NBC protective postures. It also removes or lessens the need for decontamination. Detailed information on NBC contamination avoidance is found in FM 3-3.

Multinational operations become more risky with the threat of NBC use. Countries that cannot protect themselves against these weapons may become the primary target of an enemy whose aim is to disintegrate the coalition. The likelihood that an enemy will use WMD against other coalition members will increase as US forces demonstrate the ability to defend effectively against their effects. Commanders should consider that possibility in all strategic, operational, and tactical planning.

Nuclear Weapons

As a force that now lacks organic nuclear capability, the Army must rely on Air Force and Navy nuclear capabilities to deter regional threats from using WMD and, should it be necessary, to respond to regional use of these weapons. The integration of nuclear weapons and long-range ballistic missile systems expands the scope of regional conflict. Ballistic missiles significantly reduce reaction times and create complex planning and decision criteria. The ability of some nations to employ nuclear weapons at extended ranges, using ballistic or cruise missiles and high-speed aircraft, will significantly enhance their effectiveness as instruments of terror. With the ability comes the possibility of conflict escalation beyond the boundaries of the region.

Using intelligence estimates, planners advise the commander of the enemy’s capability to employ nuclear weapons and under what conditions he is most likely to do so. A significant intelligence task is locating these weapons and assessing the probability of their employment. Accordingly, the integration of national, joint, and multinational intelligence means is vital to this effort.

The immediate effects of a nuclear detonation are blast, thermal radiation, initial nuclear radiation, and electromagnetic pulse (EMP). These effects can cause significant personnel and materiel losses. Secondary effects include urban devastation, fires, and radiological contamination. The EMP from a nuclear detonation can affect unshielded electronic equipment and degrade C3I systems. Residual radiation can also have long-term effects on personnel, equipment, facilities, terrain, and water sources. Therefore, ensuring that friendly force dispositions do not provide lucrative targets for nuclear weapons is important.

Biological Weapons

While the US has renounced the use of biological weapons, many nations have not. The availability of biological weapons to possible enemies requires that commanders prepare for operations in a biological
environment. Defensive measures are necessary to mitigate the effects of a biological attack. Both military and civilian populations require information and psychological and medical preparation.

**Chemical Weapons**

All current and future operations have the potential to occur in a chemical environment. US policy does not condone or authorize first use of chemical weapons. However, preparedness to operate in this environment negates many possible advantages for an enemy to employ these weapons. This preparedness is itself a deterrent.

Chemical weapons produce immediate and delayed effects that can hamper operations through the contamination of equipment, supplies, and critical terrain features. Commanders can reduce the effects of chemical employment by applying the fundamentals of contamination avoidance, protection, and decontamination. Chemical reconnaissance and decontamination are two planning imperatives for all future missions; training is the key. Detailed information on providing NBC protection to the force, as well as risk analysis and assessment, is found in FM 3-4.

**OPERATIONAL BATTLE COMMAND**

Initially described in FM 100-5, *operational battle command* is the exercise of authority and direction by a commander to accomplish operational objectives. The control mechanisms support the exercise of battle command. The commander’s vision and his stated intent guide the organization toward the accomplishment of their mission or assigned tasks. Battle command focuses efforts, establishes limits, and provides structure to operational functions. Battle command supports the organization in the conduct of current operations while planning and preparing for future operations.

**THE COMMANDERS RESPONSIBILITIES**

Visualizing the battlefield is a continuing requirement for commanders. Battle command at the operational level includes the collection and protection of information, the assessment of that information, the selection of appropriate actions, and the establishment of direction for the leaders of subordinate operational forces. In exercising battle command, the operational-level commander considers those assets available from higher headquarters as well as from other service components and allies. He then organizes his command and delegates responsibilities.

Operational-level battle command requires longer lead times, involves a greater span of control, and is inherently joint and often multinational. It includes tactical-level principles such as issuing mission orders, anticipating requirements, and using initiative. The senior army commander translates these principles, the CINC's strategic direction, and the operational-level objectives into a clear statement of intent.

The concept of battle space was developed to help the commander visualize and organize the projection of combat power to gain physical dominance over the enemy. Battle space is the three-dimensional physical environment—that is not constrained by boundaries—in which commanders visualize conducting combat operations over time. Commanders use the concept of battle space to help determine how the terrain and all available combat power can be used to dominate the enemy and protect the force. Eventually, this vision becomes the battlefield framework from which the commander’s intent and concept of operation are derived. Understanding of this concept contributes to the synchronization of full-dimensional operations.

Understanding also allows commanders to synchronize combat power against the enemy and keep the enemy from extending his battle space to its greatest range. This helps commanders determine how they might task-organize and position their units. By understanding how to visualize operations to disrupt the enemy in depth, commanders can synchronize operations to disrupt the enemy in depth to throw him off balance, to attack his functions, and to set the conditions for decisive victory. Synchronization, sequencing, and phasing of the battle within the battle space is critical to success. New technology in
digitization has provided opportunities for improved battlefield situational awareness and increased weapons systems lethality. Digitization efforts include ground maneuver battle space as well as the airspace above the theater. Digitization increases operational tempo and protects friendly forces. Battle space is discussed in detail in FM 100-5 and TRADOC Pamphlet 525-5.

The senior army commander maintains clear unity of command during changes of operational phases. This unity includes relationships with joint and multinational organizations. Significant changes in command relationships require phasing plans to avoid confusion. Any major organizational changes require a review of the existing battle command process.

THE COMMANDER’S VISION

A senior army commander performs four functions to implement his vision and achieve proper operational battle command. First, he decides upon and communicates his intent and provides direction so that others can understand and respond. Next, he establishes the structure to focus effort. Then, he plans and organizes the activities necessary to get results. Finally, he motivates, influences, and supervises the force to develop and sustain the organizational purpose required to accomplish the mission.

Communicating the Commander’s Intent

The commander’s intent is a concise expression of the commander’s expected outcome of an operation. The commander’s intent funnels an organization’s collective activities to achieve the commander’s desired outcome. The commander’s intent is the central goal and stand-alone reference that enables subordinates to gain the required flexibility in planning and executing. It is the standard reference point from which all present and future subordinates’ actions evolve.

Commanders and leaders—guided by their commander’s intent—who can make decisions can better ensure the success of the force as a whole when conditions are vague and confusing and communication is limited or impossible. The design of commander’s intent is not to restrain but to empower subordinates by giving them freedom of action to accomplish a mission.

Structuring to Focus Effort

Structure is critical for implementing the commander’s vision. At the operational level, the complexity and scope of the mission contribute to uncertainty. Leaders cannot always draw upon experience or previous solutions to problems that may be entirely different. An important component is establishing the rules and defining the limits. ROE, control measures, degree of risk, success criteria, report formats, and other tools contribute to the function of establishing structure. Many of these matters are standard procedures in smaller units. However, at echelons above corps (EAC), the inherent joint and multinational nature of operations, along with the peculiarities of each theater, compel the senior army commander to specify certain elements.

Structuring focuses effort. Structure is a characteristic of the control function of leadership. The senior army commander applies structure when he assigns missions and communicates his vision. Structure is accomplished formally through orders and directives and informally in communicating with subordinate commanders.

Planning and Organizing

Operational planning begins with the assignment of a mission or with the commander’s recognition of a requirement; it continues until the mission is accomplished. The staff uses the commander’s intent to develop and coordinate the supporting operation plan. Once the commander develops the plan, he organizes his command and designates command relationships to accomplish the mission.

An operational-level commander keeps his eye on long-range objectives throughout any operation. He views tactical outcomes and task accomplishments from the perspective of how they contribute to the major operation. While tactical setbacks might cause adjustments to the operation, they should not unduly divert attention away from the operational objective.

In the plan development process, the commander and his staff interact continuously during the commander’s analysis, the restated mission, guidance to the staff, estimates, and development of COAs. This interaction continues through the commander’s decision to publish an order. Continuous feedback and coordination ensures that the staff and commander focus on the objective.
Motivating and Influencing the Force

At the operational level, leadership and command is no longer simply a direct influence process. It also includes a well-formed ability to exercise indirect, organizational leadership. Success depends on creating and maintaining cohesive teams, units, and organizations, using both direct and indirect modes of leadership. FM 22-103 discusses these modes of leadership.

OPERATIONAL INTELLIGENCE

*Operational intelligence* is that intelligence required for the planning and conduct of major operations within a theater of operations. At the operational level of war, the joint and multinational intelligence system does not concentrate just on the collection, identification, location, and analysis of the center of gravity and operational objectives. It also must focus its production effort downward and concentrate efforts on warfighting priority intelligence requirements (PIR).

- Basic (or finished) intelligence.
- Strategic indications and warnings.
- Tactical warnings.
- Current intelligence reporting.
- Intelligence-preparation-of-the-battlefield (IPB) on an operational or theater basis.
- Targeting intelligence.
- Battle damage assessment (BDA) and poststrike assessment.
- Collection requirements management (synchronization of intelligence product reports).

The operational-level intelligence organizations also provide unique counterintelligence (CI), signals intelligence (SIGINT), imagery intelligence (IMINT), measurement and signatures intelligence (MASINT), technical intelligence (TECHINT), human intelligence (HUMINT), security countermeasures services, and force protection. These capabilities are found within the units of the operational-level military intelligence (MI) organization. An example of a typical theater MI structure is discussed in detail in Appendix A.

COLLECTION

Military leaders normally rely on DOD or other government agencies to monitor and assess operational-level information applicable to nonhostile situations that could require military support. MI efforts focus normally on potentially hostile threats. This intelligence leads to the identification and location of high-payoff targets that, if successfully attacked, help achieve the assigned operational-level objective.

During hostilities, the focus of the operational-level intelligence effort is to analyze the enemy’s operational capabilities and estimate his intent. Many elements of analysis that underwrite war or conflict tactical intelligence apply at the operational level, for example, enemy order-of-battle, enemy capabilities, WMD, doctrinal norms, and characteristics of the AOR.

Commanders and their intelligence and chemical officers should evaluate these elements and other products and reports in a broad context. They should also establish Army force collection requirements and allocate organic and supporting collection assets.

A key role for the Army service component is to expedite access to and facilitate dissemination of theater and national-level intelligence through the JIC. Intelligence at the operational-level requires information broader than that normally associated with the tactical echelons. Political, economic, and social factors affect the enemy decision-making process and the corresponding friendly collection plan.

PRIORITY INTELLIGENCE REQUIREMENTS

Intelligence at the operational level must project well into the future. The senior army commander drives the intelligence effort by articulating PIR and information requirements needed in his decision-making process. For intelligence to be timely, this commander must
plan and control the intelligence effort with the same level of interest and personal involvement he devotes to other functions. In particular, he must assure that his intelligence system distributes products and intelligence information that meet the needs of his staff and the requirements of his subordinate commanders.

INTEGRATION

Intelligence is vital to the design of a successful operation. The senior army commander must integrate intelligence with all the other operational-level functions. Tactical commanders must react quickly to unanticipated shifts in the flow of battle with forces reserved for that purpose. Operational-level commanders, however, must determine their lines of operations and lines of support much further in advance. Deployment of intelligence collection personnel as part of the force establishing a forward presence in a contingency area contributes to this capability. Commanders should consider both permanent stationing and periodic deployment of CONUS-based resources.

SYNCHRONIZATION

Synchronization is the arrangement of operations and battlefield activities in time, space, resources, and purpose to produce maximum relative combat power at a decisive point. It focuses the vast arsenal of intelligence resources available from national to division levels to accomplish the desired result—synchronized intelligence operations at each level that satisfy and deliver PIR to theater and combat commanders.

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 intelligence officer takes the commander’s PIR and backward plans to orchestrate the collection and production efforts with the operation and deliver intelligence when required. Intelligence synchronization is a continuous process that ensures the intelligence system answers the commander’s intelligence requirements in time to influence his decisions.

VULNERABILITIES

Operational-level commanders must clearly understand both enemy and friendly capabilities and vulnerabilities. This understanding focuses on hostile situations but includes information applicable in nation assistance, disaster relief, and other nonhostile situations.

POTENTIAL THREAT CAPABILITIES

Potential threat operational doctrine and force capabilities across the range of military operations remain the largest part of military collection requirements. As collectors probe, the critical focus must be on the nature of the enemy’s battle command structure.

Collectors must seek the identity and personal characteristics of opposing operational commanders, their relationships with their superiors and subordinates, and the effects of these relationships on the mechanisms through which the enemy makes operational decisions. Questions that may be asked include—

• What freedom of action does the opposing commander have?
• How aggressively is he likely to exercise it?
• What degree of compliance can he expect from his subordinates?
• How effective is his battle command system?

Such questions are more critical at the operational-level than at the tactical level, particularly for those military forces in which initiative is reserved at relatively high levels of command. A vital operational-level intelligence task is to discover who commands and how he exercises command in a given situation.

COMMANDER’S REQUIREMENTS

The senior army commander requires a risk assessment concerning friendly susceptibilities and vulnerabilities an enemy may exploit. This assessment is part of predictive products that support the commander’s battle planning. Intelligence agencies also must obtain information concerning the nature and characteristics of the AOR, to include significant hazards. The commander needs to know the enemy’s total capability, the area’s basic physical features, climatological characteristics, and topography. Information should include significant military, technical, scientific, diplomatic, economic, industrial, geographic, demographic, topographic, hydrographic, climatic, cultural,
and psychological features of the area. This information contributes to hostile and nonhostile military preparations.

**PROBLEMS**

The operational-level intelligence collection process has some unique characteristics. No analytical method or mechanism completely eliminates the problems of uncertainly, volume, and security.

**Uncertainty**

The products of intelligence at this level are sometimes imperfect guides to action; therefore, senior army commanders may be required to take risks. Commanders can mitigate these risks by clearly articulating the PIR and information requirements they need for their decision making. The senior intelligence officer mitigates risk by ensuring that facts are distinguished clearly from assumptions and not by constraining intelligence estimates by preconceived expectations of preferences.

**Volume**

Another concern is the sheer volume of intelligence that can overwhelm the commander and his staff. The senior intelligence officer must manage this volume and clearly separate the key intelligence reports the commander and his staff need from the background intelligence-supporting analysis. A coordinated push mechanism that alerts senior army commanders of significant changes in the situation must be complemented by a pull mechanism that keeps theater, departmental, and national activities focused on support to military operations.

**Security**

Operational-level commanders must always consider security when working with sensitive intelligence information, especially in the multinational operational environment. Operational-level commanders normally have access to national strategic intelligence means. Often, these systems can provide valuable insights into probable enemy intentions. By their very nature, these national collection means are among the most sensitive of intelligence assets, especially those sources most likely to reveal probable enemy intentions. Commanders must therefore carefully balance their desire to act on information derived from these sources, with the realization that such action could risk exposing the source and compromising the national defense capability. The operational-level commander must make the decision on the information to be shared. In nonhostile situations, revealing information gained from national assets could compromise US defense capabilities. In multinational operations, the problem is compounded by questions concerning allied internal security.

**DISSEMINATION**

Senior commanders require free and timely exchange of intelligence to make decisions with confidence. Intelligence is timely if it allows the commander to act at the appropriate time. The dissemination means and the form employed affect the timeliness of the dissemination of intelligence. The timely dissemination of usable and pertinent intelligence is the most important intelligence problem that must be solved on the battlefield.

**OPERATIONAL LOGISTICS**

*Operational logistics* consists of logistical and other support activities required to support the force during campaigns and major operations within a theater of operations. Using the LPT process, logisticians at all echelons determine the logistics requirements to support the CINC's campaign plan. Logistics plays a dominant role in maintaining force readiness for operations, mobilizing critical human and materiel resources, moving the force to its intended AO, sustaining the force throughout the duration of operations, redeploying the force to its peacetime base or next contingency area, restoring the Army's total capability, and demobilizing resources.

A force-projection army requires a logistics system that anticipates requirements and makes use of all available resources, improvising when required. The Army logistics system relies on local resources, when possible, whether they are those of host nations or those contracted or purchased. The system recognizes constraints of time and limits of strategic transportation systems and compensates by pre-positioning materiel, either afloat or ashore, in or near likely future
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AOs. It makes use of all resources available, to include DA and those of other government agencies, as well as contractor personnel.

OPERATIONAL SUPPORT OF THE FORCE

Operational support of the force extends from the theater of operations logistics bases to the forward CSS units and facilities. Early in an operation, logistics planning and management cells within the ASCC structure are used to ensure rapid establishment of battle command of logistics and to determine future support requirements.

As the theater matures, a requirement for separate, more formal logistical battle command organizations may exist. Based on the CINC's campaign plan and the operations to be conducted, the ASCC determines the nature and scope of the logistical force structure. See FM 100-16 for a detailed description of the logistics function at the operational level of war.

Logisticians concentrate on providing capabilities, not organizations, to fulfill whatever support requirements exist. Logisticians use logistics support bases to fulfill support requirements as far forward as possible. They tailor logistics forces so that the required capability, and nothing more, is deployed and employed. Although local resources are used, logisticians rely on a CONUS-based support source through communications and reliable transportation and distribution systems.

The theater of operations logistics base, in performing its theater of operations logistics functions, links strategic sustainment to tactical CSS. At the operational level of activity, the familiar distinction between operations and logistics begins to blur. Logistics is synonymous with operations and becomes a significant undertaking of the ASCC and his staff. Commanders conducting operations across the range of military operations must concern themselves with operational support.

Operational logistics is the link between the strategic and tactical levels. It encompasses support required to sustain joint and multinational campaigns, other military activities, US forces, and forces of friendly countries or groups within an AO. Military units, augmented by DOD civilians, contractor personnel, and available host nation resources, make up the organizational structure found at this level.

Operational-level logistics support may be complemented by the deployment of USAMC's LSE. The LSE, largely a table of distribution and allowances (TDA) activity, performs any logistics function not normally performed by a table of organization and equipment (TOE) units. It is a self-contained organization that may be staffed with any combination of civilian and military personnel required to perform specialized tasks. Civilians may be DA or DOD, or they may be contractors who agree to deploy to support highly sophisticated equipment. Military personnel are battle-rostered from other duty assignments or brought in to fulfill special requirements of the LSE. The LSE's unique skills include depot maintenance, oil analysis, calibration of test equipment, ammunition surveillance, release of pre-positioned strategic stocks, materiel fielding, technology insertion, and BDA.

The primary focus of the operational logisticians is on—

- Reception.
- Position of facilities.
- Materiel management.
- Movement control.
- Distribution management.
- Reconstitution and regeneration.
- Redeployment.

As the CINC develops his strategic concept of operation, he concurrently develops a concept of support in coordination with his service component commanders. They and their staffs consider a myriad of logistics factors that affect the ability of the operational forces to conduct operations. Among the most conspicuous, tangible resources are equipment and other materials of war. When resources are limited, the CINC/ARFOR must prioritize the allocation of materiel among his commands, giving the preponderance of support to forces making the main effort and sometimes shifting priorities as the campaign unfolds.

At the campaign- and major-operation-planning levels, logistics is a dominant factor in determining the nature and tempo of operations. Sound logistics planning and analysis are factors that allow for rapid changes to operations plans. Logistics cannot win a war, but its absence or inadequacy can

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cause defeat. Operational-level activities are characterized by—

- High consumption of military materiel.
- A great diversity of equipment types.
- Expansion of the battle area, resulting from the employment of sophisticated weapons, communications, and sensors by both sides.
- Extended lines of operation.
- Constrained resources.

**COMBAT SERVICE SUPPORT CHARACTERISTICS**

Senior army commanders must effectively apply the five CSS characteristics: anticipation, integration, continuity, responsiveness, and improvisation in planning and conducting the tactical CSS functions of manning, arming, fueling, fixing, moving the force, and sustaining soldiers and their systems.

**Anticipation**

Anticipation ensures CSS operations are agile and characterized by the demonstration of initiative. Requirements must be accurately projected to provide resources at the necessary time and place. The synchronization of logistics with operations is also a part of anticipation. This synchronization requires a versatile and mobile organization structure that maintains an operational perspective.

**Integration**

Integration recognizes that CSS is integral to the conduct of operations and the two are mutually supportive. It ensures the agility and versatility of an operation by providing the maximum operational freedom. Standardization and interoperability agreements contribute to integration in the joint and multinational environment.

**Continuity**

Continuity provides for the continued flow of CSS that is essential to successful operations. It exploits operational lulls to restore logistics capabilities depleted during past operations. Alternative approaches are sought to avoid total reliance on any single source.

**Responsiveness**

Responsiveness provides for rapid reaction during a crisis. The CSS challenge is to make required adjustments as the crisis response is refined and the situation evolves. Forces must be tailorable to meet force-projection requirements that restrict the deployment of entire CSS organizations. A split-based logistics concept complements this capability. Units must compensate for partial organizations deployed in tailored packages and for operating losses through the formation of provisional units. These units must be able to surge support at critical times and locations. The concept of modularity must be built into unit design to facilitate this process.

**Improvisation**

Improvisation helps units meet CSS needs with available resources and may call for nonstandard solutions. Improvisation permits solutions to anticipated and real problems where no solution has been identified previously.

**TACTICAL COMBAT SERVICE SUPPORT FUNCTIONS**

An operational perspective on logistics requires the translation of the five CSS characteristics into tactical-level applications as described by the CSS functions of manning, arming, fueling, fixing, moving the force, and sustaining soldiers and their systems.

**Manning**

The manning function provides for unit and individual replacements. In addition, it provides for personnel readiness management and casualty management.

**Arming**

The arming function replenishes arms, munitions, and equipment in an environment characterized by high consumption rates, the demands of which are controlled by throughput distribution and the establishment of controlled supply rates.

**Fueling**

The fueling function ensures the availability of fuels and packaged POL products for a highly mobile force with the potential for high consumption rates demanding a dependable fueling system.

**Fixing**

The fixing function provides for preserving availability of equipment. This function is
performed as far forward as possible and in minimum time. Expedited means of recovery, repair, and return are characteristic of the function.

Moving the Force

This function involves transportation operations of units and materiel, often, this function may be done on short notice for large forces involved in major shifts of direction. Total asset visibility, in-transit visibility, and contracting support are critical to the performance of this function.

Sustaining Soldiers and Their Systems

This function has five elements: personnel service support, health service support, field services, quality of life, and general supply support. Public affairs (PA), religious support, and legal support operations are elements of personnel service support. These areas are described in [Appendix A] of this manual, in FM 100-10, in FM 100-16, and in branch-specific manuals.

Historical Perspective

During the deployment stage of Operation Desert Shield, US forces were faced with the task of conducting operations in an austere theater. Having anticipated the difficulty of operations in this environment, plans had been made and resources put in place for this eventuality.

On 22 August 1990, the first Army pre-positioned ship, the USS Green Harbor, completed its 2,700-mile trip from Diego Garcia to discharge its cargo at ad Dammam, Saudi Arabia. During the mid-eighties, the Army had stocked the Green Harbor and three similar vessels with enough tentage, food, ammunition, and water purification and refrigeration equipment to provide a logistical jump-start to any Gulf operation until seaborne transport could arrive from the United States. After the Green Harbor arrived, the logistics was well under way and the theater in Saudi Arabia continued to build at an extraordinary rate. (Certain Victory, 2 August 1993)

Adaptability, innovation, and ingenuity worked to fill voids in the logistics system. Soldiers’ and leaders’ individual initiative and determination to get the job done made the logistical system work. As an example, convoy support centers were established to increase road network efficiency. These centers resembled huge truck stops in the desert, and, like all truck stops, operated 24 hours a day, providing fuel, latrines, food, sleeping tents, and limited vehicle repair facilities. The convoy support centers became welcome oases for exhausted long-haul transporters.

Upon initiation of the ground war, logistics support was even more critical. During the planning stages, logisticians realized that as the LOCs extended, resupply efforts would become increasingly difficult. Therefore, moving as quickly as possible, yet stealthfully, to retain secrecy, the 22d Support Command began to establish forward logistics bases to counter the extended LOCs. Vast quantities of supplies were shifted also to the west by the 22d Support Command. These supply bases contained enough materiel to support combat operations for up to 60 days. Some supply bases were moved several times, to the west and then northward, once the ground operation commenced. (Conduct of the Persian Gulf Conflict, An Interim Report to Congress, July 1991)