FM 7-15

THE ARMY UNIVERSAL TASK LIST

AUGUST 2003

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The Army Universal Task List

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Preface

FM 7-15 describes the structure and content of the Army Universal Task List (AUTL). It provides a standard, doctrinal foundation and catalogue of the Army's tactical collective tasks. Units and staffs perform these tactical collective tasks at corps level and below. For each task, the AUTL provides a definition, a numeric reference hierarchy, and the measures of performance for evaluating the task. As a catalogue, it captures doctrine as it existed on the date of its publication.

As a catalogue, the AUTL can assist a commander in his mission essential task list (METL) development process by providing all the collective tasks possible for a tactical unit of company-size and above and staff sections. Commanders should use the AUTL as a cross-reference for tactical tasks. They use it to extract METL tasks only when there is no current mission training plan (MTP) for that echeloned organization, there is an unrevised MTP to delineate tasks, or the current MTP is incomplete. FM 7-0 and FM 25-101 discuss and detail METL development and requirements.

The AUTL will serve as the basis for mission analysis during tactical collective task development by proponents and centers. This manual will be updated on a regular basis. If a new ATUL task requirement is identified or developed by the proponent, the new task will be provided to the Combined Arms Doctrine Directorate (CADD) for approval and input. The AUTL provides the list of Army tactical tasks. Proponents and schools are responsible for writing and defining the conditions and standards for supporting collective tasks.

The AUTL does not include tasks Army forces perform as part of joint and multinational forces at the operational and strategic levels. Those tasks are included in the Universal Joint Task List (UJTL) (CJCSM 3500.04C). The UJTL defines tasks and functions performed by Army elements operating at the operational and strategic levels of war. The UJTL provides an overall description of joint tasks to apply at the strategic-national, strategic-theater, and operational levels of command. The UJTL also provides a standard reference system that TRADOC combat developers use in objective force combat developments, such as front end analysis concerning the capabilities of an objective force element. Each military service is required to publish its own tactical task list to supplement the UJTL. (The Bibliography includes the other services' task lists.) The AUTL is subordinate to the UJTL.

PURPOSE

The AUTL is the comprehensive listing of Army tactical-level collective tasks. The AUTL complements the UJTL by providing tactical-level Army-specific tasks. The AUTL—

- Provides a common, doctrinal structure for collective tasks that support Army tactical missions and operations performed by Army units and staffs.
- Articulates what tasks the Army performs to accomplish missions, but does not describe how success occurs.
- Applies to all four types of military operations (offense, defense, stability, and support).
- Provides standard definitions and helps establish a common language and reference system for all tactical echelons (from company to corps) and tactical staff sections.

- Uses approved definitions or derived definitions from evolving doctrine.
- Addresses each Army tactical task (ART) in only one location.
- Lists ARTs subordinate to each of the seven Battlefield Operating Systems (BOS) (Chapters 1-7) and the tasks that support execution of the Army's tactical missions (Chapter 8).
- Provides a table with measures of performance that can be used to develop standards for each task in Chapters 1-7 and generic measures of performance for tasks in Chapter 8.

At the upper levels, the AUTL provides a concise picture of the major activities of a force. At lower levels, it provides increased detail on what the force must do to accomplish its mission.

SCOPE

Army tactical tasks apply at the tactical level of war. Although the AUTL emphasizes tasks performed by Army units, the Army does not go to war alone. Therefore, the AUTL includes tactical tasks typically performed by other services to support Army forces. Chapters 1-7 detail the tactical tasks within each of the seven BOS: intelligence, maneuver, fire support, air defense, mobility/countermobility/survivability, combat service support, and command and control. The BOS group related tasks according to battlefield use. In addition, Chapters 1-7 include a menu of measures of performance associated with each BOS task.

Chapter 8 captures the tactical tasks that support execution of Army doctrinal tactical missions and operations. Chapter 8 is not another battlefield operating system. The missions and operations described in this chapter are combined arms in nature and do not fall under the purview of any one BOS. Commanders, their staffs, combat developers, training developers, and doctrine analysts can use this chapter to determine what missions and operations a given tactical organization is designed or should be designed to accomplish. There are four measures of performance for tasks in Chapter 8—

- Mission accomplishment occurs within the higher commander's intent statement of what the force must do and the conditions.
- Mission accomplishment occurs within the higher commander's specified timeline and his risk assessment for fratricide avoidance and collateral damage.
- Mission accomplishment occurs with the minimum expenditure of resources.
- After mission accomplishment the unit remains capable of executing assigned future missions and operations.

Trainers—regardless of their status as unit commanders, unit operations officers, or uniformed and civilian training developers within the US Army Training and Doctrine Command—will use the definitions in these chapters to describe specified and implied tasks of missions in common terms. However, ART definitions do not specify who or what type of unit performs the task, what means to use, when the task will be performed, or how to perform a task. A complete mission statement provides all those specifics. Trainers determine those specifics based on their unique circumstances since ARTs are independent of conditions.

Trainers use the measures of performance provided in Chapters 1-7 as a basis from which to develop standards of performance for a specific unit in specific conditions. Examples of such standards are found in published Army Training and Evaluation Program (ARTEP) MTPs. Those standards reflect the existing factors of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). For example, time is a measure of performance for the displacement of a command post (ART 7.1.2). However, a trainer will use a standard measuring in minutes for the displacement of a battalion-level tactical

command post. He will use a standard measuring in days for the displacement of a corps main command post. Measures of performance are neither directive nor all-inclusive. Trainers should use them as a guide and modify or expand them based on their experience and needs.

Environmental conditions are factors affecting task performance. When linked to tactical tasks, conditions help frame the differences or similarities between missions. Refer to enclosure C of the UJTL for descriptions of joint conditions.

APPLICABILITY

FM 7-15 applies to commanders and trainers at all tactical echelons and to doctrine, combat, and training developers who develop doctrine, tactics, techniques, and procedures for the tactical level of war. It applies to the active and reserve components.

The AUTL provides a common language and reference system for doctrine, combat, and training developers. The link between planners and trainers helps ensure that forces train the way they will fight. The AUTL also provides a basis for establishing unit-specific ARTEP MTPs. It provides a catalogue of tasks to assist in identifying those tasks that are essential to accomplish the organization's operational mission. The AUTL's linkage to the UJTL at the operational and strategic level aids analysts and planners in understanding and integrating joint operations.

ADMINISTRATIVE INSTRUCTIONS

FM 7-15 supersedes TRADOC PAM 11-9, *Blueprint of the Battlefield*, 27 April 1990.

In this manual, the term "force" refers to Army combined arms organizations that apply the synchronized or simultaneous combat power of several arms and services.

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

This manual lists a single reference for each task after the task definition. It also gives the abbreviation for the proponent for the task after the manual reference.

The proponent for this manual is US Army Training and Doctrine Command (TRADOC). Send comments and recommendations on DA Form 2028 to Commander, US Army Combined Arms Center and Fort Leavenworth, Combined Arms Doctrine Directorate, ATTN: ATZL-FD-CD, 1 Reynolds Roads, Building 111, Fort Leavenworth, KS 66027-1352.

Introduction

Army forces integrate their efforts with other services to achieve the joint force commander's intent. The primary functions of The Army, as outlined in Department of Defense Directive 5100.1, are to organize, equip, and train forces for the conduct of prompt and sustained combat operations on land. Accordingly, The Army possesses the capability to defeat enemy land forces and to seize, occupy, and defend land areas. Additionally, it can conduct air and missile defense, space and space control operations, and joint amphibious and airborne operations. These capabilities require the support of special operations forces, the operation of landlines of communications, and civil programs prescribed by law.

The Army's mission essential tasks described in FM 3-0 derive from statutory requirements, operational experience, strategies for employing military forces, and operations requirements of the combatant commanders. They are the operational expression of the Army's core competencies contained in FM 1. Although these tasks are termed the Army METL, all Army units develop their own battle focused METLs as described in FM 7-0.

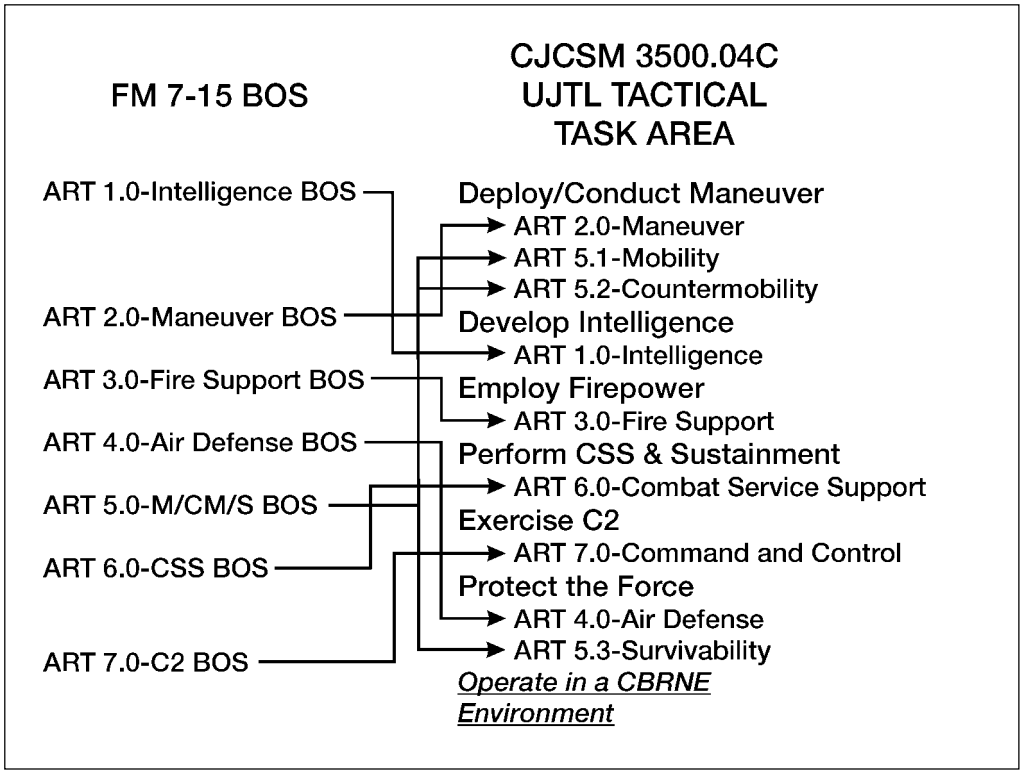
Army Mission Essential Tasks

- Shape the security environment
- Respond promptly to crisis
- Mobilize the Army
- Conduct forcible entry operations
- Dominate land operations
- Provide support to civil authorities

The Army METL tasks in FM 3-0 describe what well-trained, superbly led, and well-equipped soldiers do for the nation. They state what the Army does so the nation can use its military power effectively across the full spectrum of operations in war, conflict, and peace. While focused on the land dimension, Army forces complement other service forces in unified action. The ability of Army forces to perform tasks generates the credible land power necessary for joint force commanders (JFCs) to preclude and deter enemy action, win decisively if deterrence fails, and establish a rapid return to sustained postconflict stability. Thus, Army forces expand a JFC's range of military options in full spectrum operations.

Joint tasks describe the current and potential capabilities of the armed forces of the United States in broad terms. They are tasks joint force commanders assign to joint staffs and integrated service components. UJTL tasks, when associated with mission conditions and standards, describe a required capability but do not describe the means necessary to fulfill a requirement.

The seven UJTL tactical task areas do not reflect how the Army has traditionally organized its physical means (soldiers, organizations, and equipment) to accomplish tactical missions. The Army organizes the ARTs contained in this manual under the seven BOS. A BOS does not represent an Army branch or proponent. Any Army organization, regardless of branch or echelon, performs tasks related to one or more of the BOS. The following figure illustrates the linkages between the seven BOS and six of the UJTL tactical task areas. (Note that the figure does not link any BOS to the tactical task area of Operate in a chemical, biological, radiological nuclear, and enhanced high explosives [CBRNE] environment. Outside TRADOC objective force combat development related activities, the Army regards the presence of CBRNE effects as another environment just as it regards the desert, jungle, mountain, and urban terrain as environments. The environment forms part of the conditions under which tasks are performed. Different environments may require different standards. They do not require different tasks.)



The AUTL breaks the BOS into ARTs. Almost any ART can be the "what" of a unit mission statement. Most ARTs can also be broken into subordinate ARTs. Subordinate ARTs can be broken in a cascade fashion until they are no longer collective tasks. At that level, tasks become individual tasks addressed in soldier's manuals. Lower level ART definitions elaborate on higher-level ART definitions.

The AUTL numbering system provides a standard reference for addressing and reporting requirements, capabilities, or issues. Diagrams in each chapter illustrate the relationship of each ART to the BOS that contains it and to the doctrinal mission hierarchy. The horizontal linkages of ARTs from different BOS require synchronizing their performance in space and time based on the concept of operations. The position of any Army tactical mission or task within the AUTL structure has no relationship to its importance. That importance always depends on the mission. Likewise, the position of an Army tactical mission or task does not imply either command or staff oversight.

Each ART appears only once in the AUTL. Doctrine determines the subordination of ARTs. If there are several logical locations for an ART, it appears at the location that depicts its most common relationships. While some BOS functions resemble one another, their definitions clearly distinguish them.

Many ARTs have parallel tasks at the other levels of war, which are addressed in the UJTL. For example, ARTs associated with preparations for overseas movement are vertically linked to operational-level force projection tasks. Vertical task linkages provide connectivity between tactical, operational, and strategic activities. However, the contributions of tactical land power to joint military power are unique in some cases and do not necessarily link directly to operational- and strategic-level UJTL tasks.

In applying the AUTL to the Army training process, a number of basic terms apply. The following table shows their definitions. Understanding the relationship of Army tactical mission

tasks, operations, and missions is important to successfully using the AUTL to establish training requirements.

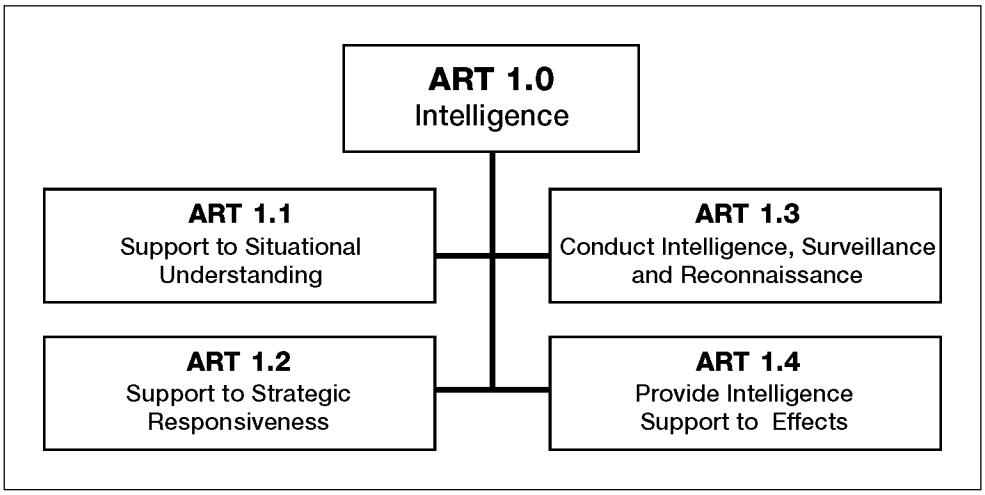
TERM	DEFINITION
Battlefield Operating Systems (BOS)	The BOS are the physical means (soldiers, organizations, and equipment) that commanders use to accomplish missions.
Task	A discrete event or action, not specific to a single unit, weapon system, or individual that enables accomplishing a mission or function.
Condition	The factors of METT-TC that produce the operational environment/specific situation in which an organization is expected to conduct operations. These affect task performance.
Standard	The minimum acceptable proficiency required in the performance of a particular task under a specified set of conditions. Commanders establish their standards as they modify published tactics, techniques, and procedures.
Mission	The essential activities assigned to an individual, unit, or force. It contains the elements of who, what, when, where, and the why (reasons therefore), but seldom specifies how.
Operation	Conducting service, training, or administrative military missions. The process of carrying out the four types of military operations (offensive, defensive, stability, and support) and their subordinate types and forms.
Tactical Mission Task	The specific activity a unit performs while conducting a form of tactical operation or form of maneuver. It is the minimum essential effects to accomplish the purpose.
Mission Essential Task List	The list of collective tasks in which an organization must be proficient to accomplish its wartime or other assigned mission.

Chapters 1 through 7 define the seven Army BOS. They define and provide measures of performance for the subordinate ARTs of each BOS. Each BOS has its own chapter. Chapter 8 defines the tasks that support execution of the Army's tactical missions and operations.

The primary source for standards for most Army tactical units is their published ARTEP MTP. It is the responsibility of commanders to establish new standards when they face significant differences in the factors of METT-TC from those associated with a task identified in a MTP training and evaluation outline (T&EO). Significant differences in the factors of METT-TC include such things as the unit being equipped with new equipment or having a modified table of organization from that documented in the MTP, such as what often occurs as a result of force packaging decisions during the deployment process. It also occurs when the unit conducts tasks not contemplated by the writer of their MTP, such as a cannon equipped field artillery battery providing installation security.

Chapter 1

ART 1.0: The Intelligence Battlefield Operating System

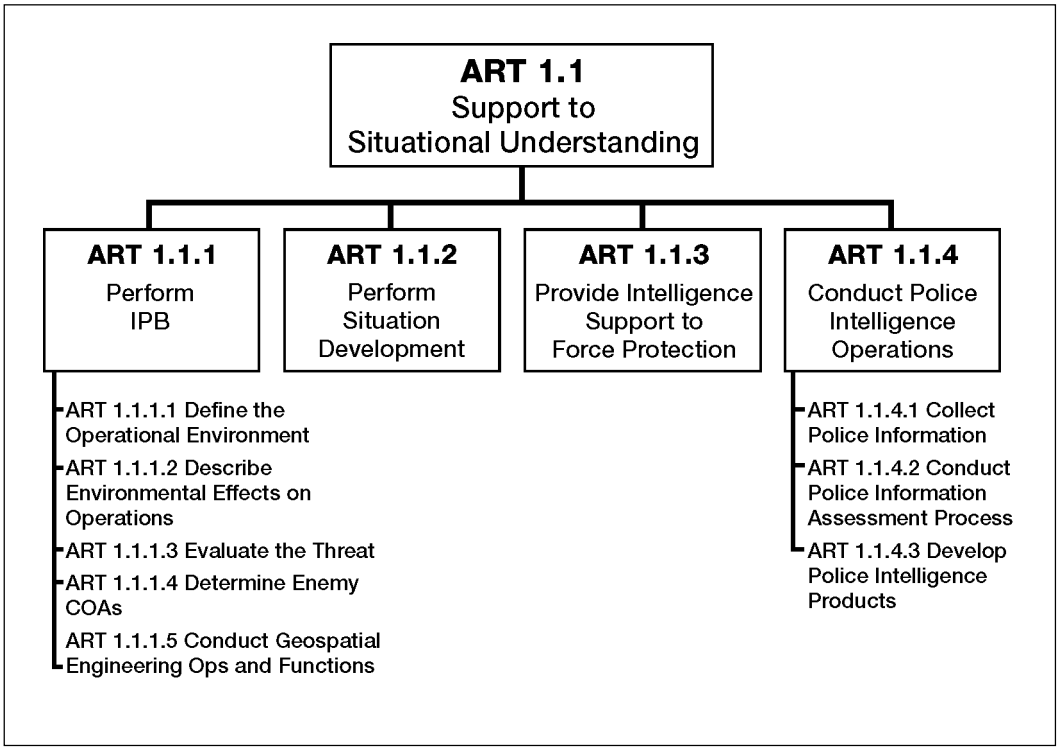


The intelligence battlefield operating system (BOS) is the activity to generate knowledge of and products portraying the enemy and the environmental features required by a command planning, preparing, executing, and assessing operations. The intelligence BOS is a flexible and adjustable architecture of procedures, personnel, organizations and equipment that provides relevant information and products relating to the threat and the environment to commanders. The personnel and organizations within the intelligence BOS conduct four primary tasks that facilitate the commander's visualization and understanding of the threat and the environment. These tasks are interactive and often take place simultaneously throughout the intelligence process. The tasks are—

- Support to situational understanding.
- Support to strategic responsiveness.
- Intelligence, surveillance and reconnaissance.
- Support to effects.

Under these tasks are the intelligence sub-tasks which follow the intelligence process of plan, prepare, collect, process, and produce. (Disseminate, analyze, and assess are inclusive within ART 7.0.) The

development of intelligence is a continuous process that is fundamental to all Army operations and integrated into battle command.



SECTION I – ART 1.1: SUPPORT TO SITUATIONAL UNDERSTANDING

1-1. The task centers on providing information and intelligence to the commander which assists him in achieving a clear understanding of the force's current state with relation to the enemy and the environment. It supports the commander's ability to make sound decisions. Support to situational understanding is comprised of four subtasks: perform intelligence preparation of the battlefield (IPB), perform situation development, provide intelligence support to force protection, and conduct police intelligence operations. (FM 34-1) (USAIC&FH)

No.	*Scale*	*Measure*
01	Yes/No	Support the commander's visualization of the battlefield and situational understanding of the threat.
02	Time	Required to provide intelligence products that facilitate the commander's visualization and situational understanding of the threat.
03	Percent	Of information and intelligence accurate in light of events.
04	Percent	Of information and intelligence requested by commander completed by latest time of value.
05	Percent	Of produced intelligence judged relevant to military situations.
06	Percent	Of produced intelligence judged timely by users.
07	Percent	Of produced intelligence judged useable by users.

ART 1.1.1 PERFORM INTELLIGENCE PREPARATION OF THE BATTLEFIELD (IPB)

1-2. IPB is the staff planning activity undertaken by the entire staff to understand the battlefield and the options it presents to friendly and threat forces. It is a systematic process of analyzing and visualizing the threat and environment in a specific geographic area for a specific mission. By applying IPB, the commander gains the information necessary to selectively apply and maximize his combat power at critical points in time and space. (FM 34-130) (USAIC&FH)

No.	*Scale*	*Measure*
01	Yes/No	The products of the IPB process support the preparation of staff estimates and the MDMP by the supported commander and his entire staff.
02	Yes/No	The unit intelligence staff, with the support of the entire staff identifies characteristics of the area of operation that will influence friendly and threat operations including terrain, weather, medical threat, infrastructure, and civilian demographics.
03	Yes/No	The entire staff, led by the intelligence staff, establishes the limits of the area of interest following the commander's guidance.
04	Yes/No	Unit intelligence staff identifies gaps in current intelligence holdings and identifies information requirements, and recommends CCIR.
05	Yes/No	The unit intelligence staff, with the support of the entire staff, defines the battlefield environment.
06	Yes/No	The unit intelligence staff, with the support of the entire staff, describes the effects that military actions will have on future operations within the AO.
07	Yes/No	The unit intelligence staff, with the support of the entire staff, evaluates the threat.
08	Yes/No	Unit intelligence staff determines the threat's COA.
09	Yes/No	Unit intelligence staff validates templates with updated information.
10	Yes/No	Commander and other unit staff elements in addition to the intelligence staff participate in the process.
11	Time	Since products of the IPB process have been updated.
12	Percent	Of produced intelligence judged to be timely (latest time information is of value) by users.
13	Percent	Of produced intelligence judged to be accurate in light of events.
14	Percent	Of produced intelligence judged to be useable by users.
15	Percent	Of produced intelligence judged to be complete, based upon request for clarification or expansion.
16	Percent	Of produced intelligence judged to be relevant to the military situation.

ART 1.1.1.1 DEFINE THE OPERATIONAL ENVIRONMENT

1-3. Initially examine the operational environment in terms of the area of operations, define the area of interest, identify other characteristics, such as the role of nongovernmental and international organizations, of the

environment that influence friendly and threat operations, and identify gaps in current intelligence holdings. (FM 34-130) (USAIC&FH)

Note: The term "*operational*" in the title of this task does not refer to the operational level of war.

No.	Scale	Measure
01	Yes/No	Unit operations are not delayed, disrupted, or canceled, as a result of a failure to identify environmental characteristics of the AO.
02	Yes/No	Commander with the assistance of his intelligence staff officer identifies his area of interest.
03	Yes/No	Unit staff identifies gaps in current information data bases.
04	Yes/No	The entire staff identifies significant characteristics of the operational environment, to include status of forces agreement, rules of engagement, and other constraints on unit operations.
05	Time	To establish or obtain a database that defines the operational environment.
06	Time	Required to collect and refine medical threat, terrain, meteorological, and hydrological data.
07	Time	Since IPB products addressing the operational environment have been updated.
08	Time	Required to determine enemy order of battle and determine patterns of operations.
09	Percent	Of terrain, meteorological, and hydrological products produced and issued on time to assigned/gained units.
10	Percent	Of medical threat, terrain, meteorological, and hydrological data received from other organizations.
11	Percent	Accuracy of enemy order of battle and doctrine, tactics, techniques, and procedures data.
12	Percent	Accuracy of operational forecasts and products, to include weather effects and terrain trafficability matrices, tide forecasts, light data, and tactical decision aids.
13	Percent	Of hazards within the AO identified and reported to appropriate headquarters.
14	Percent	Of noncombatant population within the AO whose location is accurately reported to appropriate headquarters.
15	Percent	Of press coverage and threat propaganda that addresses friendly activities within an AO.
16	Percent	Of the local legal and illegal economy correctly identified in area studies.
17	Percent	Of local decision makers and centers of influence correctly identified in area studies. This includes official and unofficial leaders.

ART 1.1.1.2 DESCRIBE ENVIRONMENTAL EFFECTS ON OPERATIONS

1-4. The activity to evaluate all aspects of the environment with which all forces involved—enemy, friendly, and neutral—must contend with during the conduct of full spectrum operations. This includes terrain, weather,

infrastructure, and demographics of the area of operations and the area of interest. (FM 34-130) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Unit operations are not delayed, disrupted, or canceled, as a result of failing to evaluate environmental aspects of the AO.
02	Yes/No	Unit staff identifies gaps in current data bases.
03	Yes/No	Staff identifies and evaluates the effect of terrain on military operations.
04	Yes/No	Staff identifies and evaluates the effect of weather on military operations.
05	Time	To establish or obtain initial battlefield database.
06	Time	Required to evaluate the impact of combat operations and weather on trafficability of the terrain.
07	Time	Since IPB products have been updated.
08	Percent	Of analysis products produced and issued on time to assigned/task organized units.
09	Percent	Of analysis products received from higher headquarters.
10	Percent	Accuracy of products provided to unit elements.
11	Percent	Of entire staff effort devoted to updating initial database.
12	Number	Of restrictions on friendly operations resulting from the presence and movement of noncombatants within the AO.

ART 1.1.1.3 EVALUATE THE THREAT

1-5. The activity to analyze current intelligence to determine how the threat normally organizes for combat and conducts operations—to include each threat operating system. The main focus of this step is to create threat models and templates that depict how the threat operates when unconstrained by the effects of the environment. (FM 34-130) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	The threat's capabilities were stated in the IPB process and accounted for in the military decision process.
02	Time	Required to incorporate new intelligence data and products into ongoing threat evaluations.
03	Time	To update or create threat models or templates.
04	Time	To identify threat capabilities.
05	Percent	Of threat capabilities, high value targets (HVTs), and threat models correctly identified.
06	Percent	Of new processed intelligence integrated to update broad COAs.

ART 1.1.1.4 DETERMINE ENEMY COURSES OF ACTION

1-6. The activity to determine possible enemy COAs, rank them in probable order of adoption, and identify the most probable and the most dangerous. (FM 34-130) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Effects of friendly actions on enemy COAs were assessed by the entire staff under the direction of the unit intelligence staff.
02	Yes/No	The enemy's likely objectives and desired end state were identified, beginning with the threat command level at one echelon above the friendly unit and ending the process at two echelons below.
03	Yes/No	Unit staff identified the opportunities and constraints that the battlefield environment offers to enemy and friendly forces.
04	Yes/No	Assess effects of friendly actions upon enemy COAs.
05	Yes/No	Unit considers what the enemy is capable of and what it prefers to do in similar situations if unconstrained by the battlefield environment.
06	Yes/No	Determination of most probable and most dangerous to a micro-level of detail and other threat COAs to a micro-level of detail as time permits.
07	Yes/No	Enemy COAs disseminated to lower, adjacent, and next higher echelon.
08	Yes/No	Enemy COA delivered in time to be of value for development of friendly COAs.
09	Time	Required to identify the enemy's likely objective and desired end state at different threat echelons of command.
10	Time	To identify and analyze the feasibility of each enemy COA in terms of time, space, resources, and force ratios required to accomplish its objective.
11	Time	To evaluate and prioritize each identified enemy COA.
12	Percent	Of threat branches and sequels correctly identified during planning.
13	Percent	Of new intelligence integrated to update enemy COAs.
14	Percent	Of forecasted significant enemy actions correctly identified during planning.
15	Percent	Of correctly identified enemy HVTs and tactical centers of mass (prior to selection of COA).

ART 1.1.1.5 CONDUCT GEOSPATIAL ENGINEERING OPERATIONS AND FUNCTIONS

1-7. Geospatial engineer operations includes the functions of terrain analysis, data collection, data generation, database management, data manipulation and exploitation, cartographic production and reproductions, and geodetic survey. The focus of geospatial engineering operations is on data generation, data management, terrain analysis, and the presentation of its results to the commander. Each function is interdependent on each other in order to prepare a geospatially accurate and timely enabled common operational picture (COP) for the commander. (FM 3-34.230) (USAES)

Notes:

ART 7.2 (Manage Tactical Information) includes the processing of sensor data, the interpretation of data into intelligent information, fusion and integration of separate source data, management of the data to include accuracy and data topology, and dissemination of tactical data information.

The inclusion of this task does not change the steps of the intelligence preparation of the battlefield process described in FM 34-1.

No.	Scale	Measure
01	Yes/No	The availability of accurate geospatial products allows the commander to deploy and employ his weapon systems effectively.
02	Yes/No	The availability of accurate geospatial products allows supported commanders and staffs to visualize their areas of operations, interest, and influence.
03	Yes/No	The availability of accurate geospatial products allows supported commanders and staffs to target enemy systems effectively.
04	Yes/No	The availability of accurate geospatial products allows supported commanders and staffs to efficiently plan air and ground missions.
05	Yes/No	The availability of accurate geospatial products allows supported commanders and staffs to counter enemy weapons and intelligence-collection capabilities.
06	Time	To conduct terrain analysis of area of operations and prepare products supporting the intelligence preparation of the battlefield process.
07	Time	To conduct geodetic survey within area of operations.
08	Time	To produce and reproduce geospatial information in sufficient quantities to meet supported unit demand.
09	Number	And types of engineer topographic elements available to support unit operations.

ART 1.1.2 PERFORM SITUATION DEVELOPMENT

1-8. Situation development is a process for analyzing information and producing current intelligence about the enemy and environment during operations. The process helps the intelligence officer recognize and interpret the indicators of enemy intentions, objectives, combat effectiveness, and potential COA. Situation development confirms or denies threat COAs, provides threat locations, explains what the threat is doing in relation to the friendly force commander's intent, and provides an estimate of threat combat effectiveness. The locations and actions of non-combatant elements and non-governmental organizations in the AO that may impact operations should also be considered. Through situation development, the intelligence officer is able to quickly identify information gaps, explain enemy activities in relation to the unit's operations, and assist the commander in gaining situational understanding. Situation development helps the commander make decisions and execute branches and sequels. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	The COA executed by threat forces was predicted in the IPB process and accounted for in the military decision making process.
02	Yes/No	Threat situational development provides information that helps the commander make decisions to execute branches and sequels.
03	Yes/No	Situational development intelligence disseminated to friendly forces.
04	Time	To produce an updated situational template.
05	Time	To confirm or deny the existing estimate of the threat's COA and update the estimate based on current intelligence, weather, and terrain data.
06	Percent	Of produced intelligence judged accurate in light of events.
07	Percent	Of produced intelligence judged complete based upon request for clarification or expansion.
08	Percent	Of produced intelligence judged relevant to military situation.
09	Percent	Of produced intelligence judged timely by users.
10	Percent	Of produced intelligence judged useable by users.

ART 1.1.3 PROVIDE INTELLIGENCE SUPPORT TO FORCE PROTECTION

1-9. Provide intelligence in support of protecting the tactical forces fighting potential so that it can be applied at the appropriate time and place. This task includes those measures the force takes to remain viable and functional by protecting itself from the effects of or recovery from enemy activities. (FM 34-1) (USAIC&FH)

Note: This task branch supports ART 5.3, Conduct Survivability Operations.

No.	Scale	Measure
01	Yes/No	Provide information on incidents by enemy troops or partisans, affecting security of force.
02	Percent	Intelligence relating to potential terrorists acts against US forces.
03	Percent	Intelligence relating to potential asymmetric attacks.
04	Percent	Intelligence relating to use of WMD.
05	Percent	Intelligence requirements to support SEAD operations.
06	Percent	Of requirements for priority intelligence assigned to counterreconnaissance elements.

ART 1.1.4 CONDUCT POLICE INTELLIGENCE OPERATIONS

1-10. Police intelligence operations (PIO) are a military police function that support, enhance, and contribute to the commander's force protection program, common operational picture, and situational understanding. The PIO function ensures that information collected during the conduct of other MP functions—maneuver and mobility support, area security, law and order, and internment and resettlement—is provided as input to the intelligence collection effort and turned into action or reports. PIO has three components—

- Collect police information.
- Conduct Police Information Assessment Process (PIAP).
- Develop police intelligence products.

The dissemination of police information is included in ART 7.2.5 (Disseminate COP and Execution Information to Higher, Lower, Adjacent, Supported, and Supporting Organizations). Joint, interagency, and multination coordination is included in ART 7.5.1 (Establish and Conduct Coordination and Liaison). (FM 3-19) (USAMPS)

Notes:

US Code, Executive Orders, DOD Directives, and Army regulations contain specific guidelines that contain specific guidance regarding prohibition on the collection of intelligence information on US citizens, US corporations, and resident aliens. These laws and regulations include criminal penalties for their violation. Any police intelligence operations directed against US citizens should undergo competent legal review prior to their initiation.

The inclusion of the police intelligence operations task branch in the intelligence battlefield operating system does not change the intelligence process described in FM 34-1.

No.	Scale	Measure
01	Yes/No	The conduct of police intelligence operations does not violate US Code and applicable DOD and Army regulations against collecting intelligence on US citizens.
02	Yes/No	Police intelligence operations contribute to reducing criminal activity within the AO.
03	Yes/No	Police intelligence products updated as additional criminal information and related data is collected.
04	Yes/No	Legal coordination and authorization obtained prior to employing technical listening equipment and technical surveillance equipment.
05	Yes/No	Commander provides list of critical assets to be protected to provost marshal.
06	Yes/No	Patterns or trends relevant to proactive law and order operations are identified.
07	Yes/No	Military Law Enforcement receives criminal information from the host nation.
08	Yes/No	Information on known or suspected criminals maintained IAW regulatory and legal guidance.
09	Yes/No	Activity files established, when applicable.
10	Yes/No	Area files established, when applicable.
11	Yes/No	Juvenile records safeguarded from unauthorized disclosure.
12	Yes/No	Liaison established and maintained with host-nation authorities, military and civilian law enforcement agencies, and other organizations as required by the factors of METT-TC.
13	Yes/No	Tactical intelligence obtained provided to echelon intelligence staff.
14	Yes/No	Police information collected according with the ISR plan.
15	Yes/No	Police information disseminated to appropriate agencies.

No.	Scale	Measure
16	Time	To develop police information requirements.
17	Time	To determine susceptibility of critical facilities to criminal threat.
18	Time	To identify military resources susceptible to theft and diversion.
19	Time	To identify criminal trends and patterns based upon police intelligence operations.
20	Time	To identify trends and patterns by continued association with identified offenders.
21	Time	To develop methods of operation to assist in eliminating or reducing vulnerability to criminal threat activities.
22	Time	To coordinate with the host nation for police information.
23	Time	To prepare Annex K, Provost Marshal ,to operations plan.
24	Time	To update criminal database as police information and data is received.
25	Time	To review internally generated police information to see if they can answer police information requirements.
26	Time	To coordinate police information collection by organic assets.
27	Time	To coordinate with staff intelligence officer for required counterintelligence support.
28	Time	To recruit and develop police informants.
29	Percent	Of identified offenders linked to criminal trends.
30	Percent	Of available US criminal intelligence resources within the AO identified by military law enforcement.
31	Percent	Of criminal-related activities reported by informants prior to their occurrence.
32	Percent	Of terrorist-related activities reported by informants prior to their occurrence.
33	Percent	Of criminal and other potentially disruptive elements within an AO identified prior to their committing hostile acts against US interests and host-nation elements.

ART 1.1.4.1 COLLECT POLICE INFORMATION

1-11. Collection of police information involves all available collection capabilities. This includes HUMINT, MASINT, and open source information. . The collection effort is not limited to criminal information. It also includes information, which may not be of a criminal nature but could pose a threat to law enforcement operations in the operating environment. Collection efforts also assist in enhancing force protection and antiterrorism through identifying potential criminal threats and other threat activities. (FM 3-19.1) (USAMPS)

Note: This task is related to ART 1.3.3 (Conduct Tactical Reconnaissance) and ART 1.3.4 (Conduct Surveillance) in that those two tasks are techniques used to collect police information. Additionally, the collection of police information must be considered when conducting ART 1.3.1 (Perform Intelligence Synchronization) and ART 1.3.2 (Perform Intelligence, Surveillance, and Reconnaissance Integration).

No.	Scale	Measure
01	Yes/No	The collection of police information does not violate US Code and applicable DOD and Army regulations against collecting intelligence on US citizens.
02	Yes/No	Police information collected allows the unit to prevent or reduce criminal activity within its AO.
03	Yes/No	Criminal intelligence products updated as additional criminal information and data is collected.
04	Yes/No	Legal coordination and authorization obtained prior to employing technical listening equipment and technical surveillance equipment.
05	Yes/No	Military law enforcement receives criminal information from the host nation.
06	Yes/No	Liaison maintained with host-nation authorities, military and civilian police agencies, and other organizations as required by the factors of METT-TC.
07	Yes/No	Police information disseminated to appropriate headquarters and agencies.
08	Yes/No	Recruit and develop police informants in the AO.
09	Time	To coordinate with the host nation for police information.
10	Time	To coordinate police information collection by organic assets.
11	Time	To coordinate with staff intelligence officer for required counterintelligence support.
12	Time	To develop police information requirements.
13	Time	To conduct law enforcement patrols designed to obtain police information.
14	Percent	Of terrorist or criminal-related activities reported by informants prior to their occurrence.
15	Percent	Of individuals conducting terrorist or criminal-related activities reported by informants after their occurrence.
16	Percent	Of criminal and other potentially disruptive elements within an AO identified before they commit hostile acts against US interests and host-nation elements.
17	Percent	Of criminal activity (such as smuggling, vice, counterfeiting, narcotics, extortion, rape, murder, robbery) occurring in an AO identified/reported.
18	Percent	Of AO covered by law enforcement patrols (mounted and dismounted).

ART 1.1.4.2 CONDUCT THE POLICE INFORMATION ASSESSMENT PROCESS

1-12. The police information assessment process (PIAP) is a tool used to contribute to police intelligence operations. Information and intelligence gained through the process contributes to all-source analysis and the IPB process. The PIAP complements the IPB process and is not a substitute. MP leaders use PIAP as a tool to continuously organize, analyze, interpret and act upon police and criminal information. Criminal and operational threats may also impact the tactical scenario and the PIAP is a method used to consider this threat and its impact on friendly forces. Military police use PIAP to identify trends and patterns of criminal activity. (FM 3-19.1) (USAMPS)

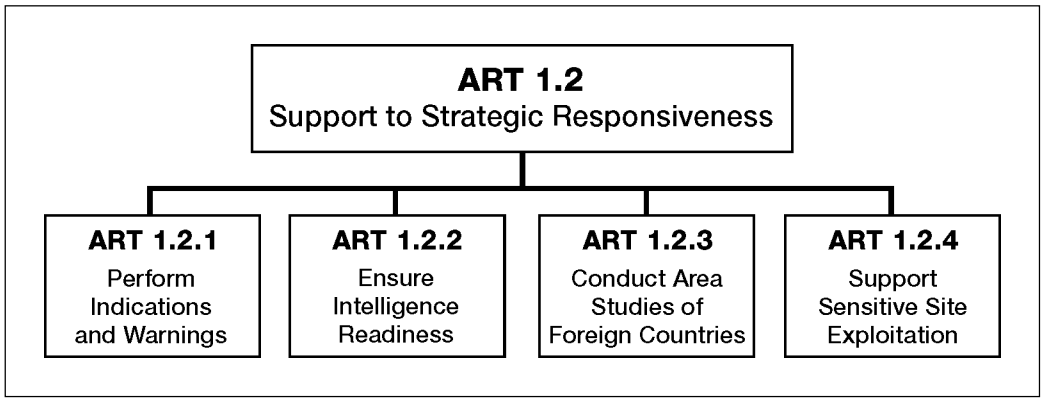
No.	Scale	Measure
01	Yes/No	The conduct of the police information assessment process does not violate US Code and applicable DOD and Army regulations against collecting intelligence on US citizens.
02	Yes/No	The conduct of the Police Information Assessment Process allows the unit to reduce criminal activity within its AO.
03	Yes/No	Coordination made for funds to establish and maintain a police informant operation.
04	Yes/No	Identified patterns or trends relevant to proactive law and order operations.
05	Yes/No	Analyzed police Information and produced actionable criminal intelligence.
06	Yes/No	Recruit and develop police informants in the AO.
07	Time	To prepare Annex K for Provost Marshal operations plan/order as required.
08	Time	To identify and assess latest criminal information collected.
09	Time	To identify criminal information resources within the AO.
10	Time	To identify criminal trends and patterns developed within the AO.
11	Time	To analyze external criminal information reports.
12	Time	To assess internally generated police information.
13	Time	To produce criminal information bulletins and alert notices.
14	Percent	Of criminal intelligence PIR collection efforts directed toward subordinate units.
15	Percent	Of available criminal intelligence resources within the AO.
16	Percent	Of terrorist and criminal-related activities reported by informants prior to their occurrence.
17	Percent	Of individuals conducting terrorist and criminal-related activities reported by informants after their occurrence.
18	Percent	Of accurate reported terrorist and criminal-related activity.

ART 1.1.4.3 DEVELOP POLICE INTELLIGENCE PRODUCTS

1-13. PIO uses the intelligence cycle to produce actionable police intelligence products used by MP leaders in tactical and non-tactical environments. Intelligence products include criminal threat assessments based on the PIAP; strategic and operational plans to support local host nation law enforcement in combating crime and/or neutralizing criminal threats to military operations based on trend and pattern analysis; and disseminating police intelligence information to law enforcement entities. Police intelligence products serve to focus police operations, which, in turn contributes to force protection and mission success. PIO provides the developed criminal intelligence product to the MI community for incorporation and fusion, which contributes to the overall intelligence picture. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	The development of the police intelligence products does not violate US Code and applicable DOD and Army regulations against collecting intelligence on US citizens.
02	Yes/No	The Police Intelligence products developed allows the unit to reduce criminal activity within its AO.

No.	Scale	Measure
03	Yes/No	Develop police intelligence products based on criminal information collected from external sources.
04	Yes/No	Identified patterns or trends relevant to proactive law and order operations.
05	Yes/No	Actionable police intelligence products.
06	Yes/No	Relevant police intelligence disseminated through military law enforcement, civilian and host nation network.
07	Yes/No	Criminal intelligence products received from civilian and host nation law enforcement network.
08	Yes/No	Military intelligence related information provided to the MI community.
09	Yes/No	Support provided to the police intelligence fusion cell.
10	Time	To identify criminal information resources within the AO.
11	Time	To identify criminal trends and patterns developed within the AO.
12	Time	To analyze external criminal information reports.
13	Time	To assess internally generated police information.
14	Time	To produce criminal information bulletins and alert notices.
15	Percent	Of investigative matters solved or resolved as a result of police intelligence.
16	Percent	Of available criminal intelligence resources within the AO.
17	Percent	Of terrorist and criminal-related activities reduced or eliminated as a result of police intelligence.
18	Percent	Of individuals identified conducting terrorist and criminal-related activities as a result of police intelligence.
19	Percent	Cost/resource savings through the use of actionable police intelligence.



SECTION II – ART 1.2: SUPPORT TO STRATEGIC RESPONSIVENESS

1-14. Intelligence support to strategic responsiveness supports staff planning and preparation by defining the full spectrum of threats, forecasting future threats and forewarning the commander of enemy actions and intentions. Support to strategic responsiveness consists of four subtasks: perform indications and warnings (I&W), ensure intelligence readiness, conduct area studies of foreign countries and support sensitive site exploitation. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Provides information to support staff planning and preparation.
02	Yes/No	Defines full spectrum of threats.
03	Yes/No	Provides forecast of future threats.
04	Yes/No	Forewarns commander of enemy actions/intentions.

ART 1.2.1 PERFORM INDICATIONS AND WARNINGS

1-15. This activity provides the commander with forewarning of enemy actions or intentions; the imminence of threat actions. The intelligence officer develops indications and warnings in order to rapidly alert the commander of events or activities that would change the basic nature of the operations. It enables the commander to quickly reorient the force to unexpected contingencies and shape the battlefield. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Indications and warnings issued in sufficient time to prevent the targeted friendly unit or installation from being surprised by the threat.
02	Yes/No	Indications and warnings disseminated after development and compared to other information and intelligence to ensure accuracy.
03	Yes/No	Intelligence officer monitors event template/matrix to determine if enemy is conducting predicted course of action.
04	Time	Between receipt of significant information and intelligence and updates of indications and warnings conditions.
05	Time	Lead time in prediction of significant changes in threat activities.
06	Time	Required to transmit indications and warnings to appropriate agencies and organizations.
07	Time	To submit intelligence portion of commander's situation report.
08	Percent	Of indications and warnings of threat actions reported, which will impact friendly forces operations.
09	Percent	Of commander's threat conditions and attack warnings issued and disseminated.
10	Percent	Of threat indicators maintained and evaluated.

ART 1.2.2 ENSURE INTELLIGENCE READINESS

1-16. Intelligence readiness operations support contingency planning and preparation by developing baseline knowledge of multiple potential threats and operational environments. These operations and related intelligence training activities engage the intelligence BOS to respond effectively to the commander's contingency planning intelligence requirements. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Provides information on incidents by enemy troops or partisans, affecting security of force
02	Percent	Of intelligence relating to potential terrorists acts against US forces.
03	Percent	Of intelligence relating to potential asymmetric attacks.
04	Percent	Of intelligence relating to using nuclear, biological, and chemical (NBC) weapons.
05	Percent	Of requirements for priority intelligence assigned to counter-reconnaissance elements.
06	Percent	Of intelligence requirements to support SEAD operations.

ART 1.2.3 CONDUCT AREA STUDIES OF FOREIGN COUNTRIES

1-17. Study and understand the cultural, social, political, religious, and moral beliefs/attitudes of allied, host-nation, or indigenous forces to assist in accomplishing goals and objectives. (FM 34-1) (USAJFKSWC)

Note: The inclusion of this task does not change the support to strategic responsiveness provided by military intelligence organization described in FM 34-1.

No.	Scale	Measure
01	Yes/No	Study provides commander/staff with necessary background information for mission accomplishment.
02	Yes/No	Study completed in time to support mission requirements.
03	Yes/No	Study gives priority to information germane to the mission or projected mission.
04	Yes/No	Study does not reproduce data contained in readily available publications.
05	Yes/No	Study uses maps, charts, and tables to graphically portray data in easily understandable and retrievable formats.
06	Time	From receipt of tasking until study is complete.
07	Time	To identify shortfalls in available data to complete study.
08	Time	To request required data not available from available resources.
09	Percent	Of information requested from outside sources provided by those outside sources.
10	Percent	Accuracy of study information, to include the following areas: geography, history, population, culture and social structure, languages, religion, US interests, civil defense, labor, legal, public administration, public education, public finance, public health, public safety, public welfare, civilian supply, civilian economics and commerce, food and agriculture, property control, public communications, public transportation, public works and utilities, arts, monuments, archives, civil information, cultural affairs, dislocated civilians, and host-nation support.

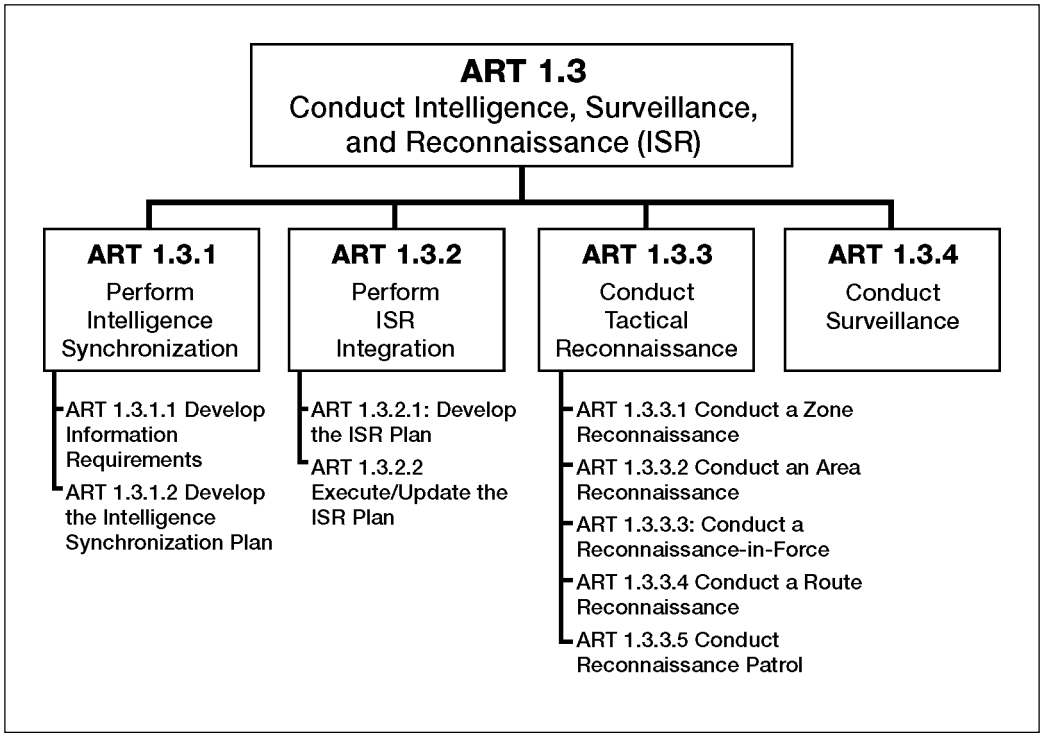
ART 1.2.4 SUPPORT SENSITIVE SITE EXPLOITATION

1-18. Sensitive site exploitation consists of a related series of activities inside a sensitive site captured from an adversary. A sensitive site is a designated, geographically limited area with special military, diplomatic, economic, or information sensitivity for the United States. This includes factories with technical data on enemy weapon systems, war crimes sites, critical hostile government facilities, areas suspected of containing persons of high rank in a hostile government or organization, terrorist money laundering, and document storage areas for secret police forces. These activities exploit personnel, documents, electronic data, and material captured at the site, while neutralizing any threat posed by the site or its contents. While the physical process of exploiting the sensitive site begins at the site itself, full exploitation may involve teams of experts located around the world. (FM 34-54) (USACAC)

Note: The inclusion of this task does not change the support to strategic responsiveness provided by military intelligence organization described in FM 34-1.

No.	*Scale*	*Measure*
01	Yes/No	Exploitation of the sensitive site supports US operational or strategic political, military, economic, and informational goals.
02	Yes/No	The unit supporting the exploitation of the sensitive site has isolated, seized, secured, and cleared the site or has relieved a unit that performed those tactical missions prior to exploiting the site under the technical direction of a subject matter experts.
03	Yes/No	Enemy or adversary knows that the site has been exploited by US forces.
04	Yes/No	Tactical unit tasked organized itself appropriately to accomplish the mission of supporting the exploitation of the sensitive site and compensated for losses.
05	Yes/No	Enemy or adversary was not able to exfiltrate sensitive equipment or material from the sensitive site.
06	Yes/No	Unit supporting the sensitive site exploitation did not suffer casualties as a result of a failure to properly managed the risks associated with the site.
07	Yes/No	Enemy or adversary was not able to destroy sensitive equipment, material, and documents or purge computers of sensitive information prior to the site being secured.
08	Yes/No	Commander of the unit supporting the exploitation of the sensitive site maintains his situational understanding throughout the operation.
09	Yes/No	Members of the unit supporting the exploitation have access to a high fidelity common operational picture throughout the operation consistent with operations security.
10	Yes/No	Leaders of the unit supporting the exploitation of the sensitive site use the military decision making process or troop leading procedures correctly to include the identification of search locations, security positions, boundaries, and fire support coordinating measures. The battlefield operating systems are coordinated and synchronized.

No.	Scale	Measure
11	Yes/No	Unit conducts operations in accordance with established rule of engagement and consideration for the nature of the sensitive site.
12	Yes/No	Unit records the results of the search and appropriately disseminates the results.
13	Yes/No	Unit supporting the exploitation of the site appropriately kills, captures, or detains enemy soldiers, adversaries, sensitive individuals, and neutrals within the site.
14	Time	Necessary to isolate the sensitive site and the forces and individuals located inside the site from outside physical, informational, and psychological support.
15	Time	Necessary to seize the sensitive site.
16	Time	Necessary to secure the sensitive site.
17	Time	Necessary to search the sensitive site.
18	Time	Necessary to establish liaison with and deploy technical experts to the sensitive site.
19	Percent	Of potential sensitive personnel, equipment, material, documents, and electronically stored files located within the site discovered during the search of the sensitive site.



SECTION III – ART 1.3: CONDUCT INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR)

1-19. With staff participation, the intelligence officer synchronizes intelligence support to the ISR effort by focusing the collection, processing, analysis and intelligence products on the critical needs of the commander.

The operations officer, in coordination with the intelligence officer, tasks and directs the available ISR assets to answer the commander's CCIR. Through various detection methods and systematic observation, reconnaissance and surveillance obtains the required information. A continuous process, this task has four subtasks: perform intelligence synchronization, perform ISR integration, conduct reconnaissance, and conduct surveillance. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Develop a strategy to answer each CCIR to accomplish ISR integration.
02	Yes/No	Determine unique support requirements for ISR assets to include maintenance, crew training, and connectivity.
03	Yes/No	ISR assets task organized to accomplish assigned tasks and missions.
04	Yes/No	Develop a detailed ISR plan through a staff process.
05	Yes/No	Obtain intelligence using intelligence reach.
06	Yes/No	Received request from higher headquarters to collect, produce or disseminate combat information or intelligence products.
07	Yes/No	Evaluate progress of answering each requirement based on reporting of information.
08	Percent	Effectiveness of ISR effort assessed and evaluated.

ART 1.3.1 PERFORM INTELLIGENCE SYNCHRONIZATION

1-20. The intelligence officer, with staff participation, synchronizes the entire collection effort to include all assets the commander controls, assets of lateral units and higher echelon units and organizations, and intelligence reach to answer the commander's PIR and IR. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	ISR synchronization is accomplished by developing a strategy to answer each SIR
02	Yes/No	Determine unique support requirements for ISR assets to include maintenance, crew training, and connectivity.
03	Yes/No	ISR task organization accomplished.
04	Yes/No	Intelligence is obtained utilizing Intelligence Reach.
05	Yes/No	Collection, production or dissemination is requested from higher headquarters.
06	Yes/No	Progress of answering each requirement is evaluated based on reporting of information
07	Percent	Effectiveness of ISR effort as evaluated and assessed.

ART 1.3.1.1 DEVELOP INFORMATION REQUIREMENTS

1-21. The intelligence staff develops a prioritized list of what information needs to be collected and produced into intelligence. Additionally, the intelligence staff dynamically updates and adjusts those requirements in response to mission adjustments/changes. This list is placed against a latest time intelligence is of value to ensure intelligence and information is reported to meet operational requirements. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Staff analyzes CCIR, including RFI from lower echelons, and orders from higher echelons.
02	Yes/No	Initial intelligence requirements identified during IPB
03	Yes/No	Mission specific PIR identified during MDMP COA development
04	Yes/No	All information and intelligence requirements prioritized and validated to ensure they meet the commander and staff needs.
05	Yes/No	Identified intelligence gaps.
06	Yes/No	Conducted wargaming.
07	Yes/No	Developed specific information requirements (SIR) and indicators
08	Yes/No	Develop SIR for each PIR and FFIR.
09	Time	To validate and incorporate PIR from higher, lower and adjacent units.
10	Time	Before next phase of an operation when the PIR are validated or updated.
11	Time	Intelligence requirements identified and if necessary dynamically updated/revised in advance of collection.
12	Time	To prioritize information and intelligence collection requirements.
13	Percent	Of PIR addressed in intelligence update.
14	Percent	Of subordinate echelon PIR supported by the echelon's information and intelligence requirements.
15	Percent	Of unvalidated PIR resubmitted by originating agency/office.
16	Percent	Of validated PIR have ongoing collection efforts directed towards answering the requirements.
17	Percent	Of PIR submitted by multiple organizations.
18	Percent	Of PIR linked to SIR.
19	Percent	Of SIR developed form PIR.
20	Number	Of open CCIR and PIR at any one time.
21	Number	Of PIR identified after collection begins.

ART 1.3.1.2 DEVELOP THE INTELLIGENCE SYNCHRONIZATION PLAN

1-22. The entire unit staff develops their information requirements and determines how best to satisfy them. The staff uses reconnaissance and surveillance assets to collect information. The intelligence synchronization plan includes all assets that the operations officer can task or request and coordination mechanisms to ensure adequate coverage of the areas of interest. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Intelligence staff analyzes requirements and develops validated prioritized requirements list.
02	Yes/No	All organic, adjacent and higher ISR assets identified.
03	Yes/No	Intelligence staff determines asset availability in coordination with the operations staff.
04	Yes/No	Determine unique support requirements for ISR assets to include maintenance, crew training, and connectivity.

No.	Scale	Measure
05	Yes/No	Intelligence staff determines availability and capabilities of assets from higher echelons.
06	Yes/No	Identify the reporting criteria and the capabilities and limitations of all ISR assets.
07	Yes/No	Intelligence synchronization plan developed and linked to information and intelligence requirements.
08	Yes/No	Intelligence synchronization plan linked to PIR and SIR.
09	Yes/No	Intelligence production supports the development of answers to intelligence requirements (specifically PIR).
10	Yes/No	Intelligence synchronization plan disseminated to operations in sufficient time for orders production and troop leading procedures.
11	Yes/No	Intelligence synchronization plan linked to dissemination plan.
12	Percent	Of available intelligence, reconnaissance, and surveillance assets identified.
13	Percent	Of requirements analyzed, validated, and prioritized.
14	Time	To determine availability of ISR assets.
15	Time	To develop Intelligence synchronization plan.

ART 1.3.2 PERFORM ISR INTEGRATION

1-23. The operations officer, in coordination with the intelligence officer and other staff members, orchestrates the tasking and directing of available ISR assets to answer the CCIR. The operations office, with input from the intelligence officer, develops tasks from the specific information requirements (SIRs) which coincide with the capabilities and limitations of the available ISR assets and the latest time information is of value (LTIOV). Intelligence requirements are identified, prioritized, and validated and an ISR plan is developed and synchronized with the scheme of maneuver. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	ISR plan focused on the CCIR.
02	Yes/No	Determine unique support requirements for ISR assets to include maintenance, crew training, and connectivity.
03	Yes/No	ISR plan does not ignore other types of information requirements.
04	Yes/No	ISR plan provides information and intelligence in sufficient time for the commander to use in the planning, preparation, execution, and assessment of operations.
05	Yes/No	ISR plan linked to a dissemination plan for passing of information and intelligence to requesting organizations.
06	Time	To analyze requirements after receipt.
07	Time	To determine indicators.
08	Time	To determine specific information and intelligence requirements.
09	Time	To determine reporting criteria.
10	Time	To produce initial ISR plan.
11	Time	To review existing information on threat capabilities.

No.	Scale	Measure
12	Time	To consider threat doctrine.
13	Time	To develop specific orders and requests (SOR) based on specific information requirements (SIR).
14	Percent	Of information requirements analyzed.
15	Percent	Of indicators correctly determined.
16	Percent	Of specific information and intelligence requirements correctly answered.
17	Percent	Of reporting requirements correctly answered.

ART 1.3.2.1 DEVELOP THE ISR PLAN

1-24. The operations officer is responsible for developing the ISR plan. The entire unit staff analyzes each requirement to determine how best to satisfy it. The staff will receive orders and RFIs from both subordinate and adjacent units and higher headquarters. The ISR plan includes all assets that the operations officer can task or request and coordination mechanisms to ensure adequate coverage of the area of interest. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Intelligence staff analyzes requirements and develops validated prioritized requirements list.
02	Yes/No	All organic, adjacent and higher ISR assets identified.
03	Yes/No	Intelligence staff determines asset availability in coordination with the operations staff.
04	Yes/No	Determine unique support requirements for ISR assets to include maintenance, crew training, and connectivity.
05	Yes/No	Intelligence staff determines availability and capabilities of assets from higher echelons.
06	Yes/No	Identify the reporting criteria and the capabilities and limitations of all ISR assets.
07	Yes/No	ISR plan developed and links to information requirements (IR), commander's critical information requirements (CCIR), and specific information requirements (SIR) to specific orders and requests (SOR) and specific collection assets.
08	Yes/No	ISR plan provides information and intelligence in sufficient time for the commander to use in planning, preparing, executing, and assessing his operation.
09	Yes/No	Intelligence production supports the development of answers to intelligence requirements (specifically PIR).
10	Yes/No	ISR plan disseminated by operations officer in sufficient time for orders production and the conduct of troop leading procedures by subordinates.
11	Yes/No	ISR plan linked to dissemination plan.
12	Yes/No	ISR plan links SIRs to specific reporting criteria and latest time information is of value (LTIOV).
13	Yes/No	Development of SOR based on SIR.
14	Percent	Of available ISR assets identified.
15	Percent	Of requirements analyzed, validated, and prioritized.

No.	Scale	Measure
16	Time	To determine availability of ISR assets.
17	Time	To develop ISR plan.

ART 1.3.2.2 EXECUTE/UPDATE THE ISR PLAN

1-25. The operations officer updates the ISR plan based on information he receives from the intelligence officer. The operations officer is the integrator and manager of the ISR effort through an integrated staff process and procedures. As PIRs are answered and new information requirements arise, the intelligence officer updates intelligence synchronization requirements and provides the new input to the operations officer who updates the ISR plan. He works closely with all staff elements to ensure the unit's organic collectors receive appropriate taskings. This ISR reflects an integrated collection strategy and employment, production and dissemination scheme that will effectively answer the commander's PIR. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Staff analyzes all PIRs, to include RFI from lower echelons, and orders from higher echelons.
02	Yes/No	ISR plan provides information and intelligence in sufficient time for the commander to use in the planning, preparation, execution, and assessment of his operation.
03	Yes/No	Develop SIR for each PIR.
04	Yes/No	SIRs are linked to specific reporting criteria, and latest time of value.
05	Yes/No	Determine unique support requirements for ISR assets to include maintenance, crew training, and connectivity.
06	Yes/No	Reports are evaluated to identify which SIR have been answered and identify which PIR/CCIR can be removed.
07	Yes/No	Reports evaluated to identify new PIR/CCIR.
08	Yes/No	New specific orders and requests (SOR) identified based on new SIRs.
09	Percent	Of PIR linked to SIR.
10	Percent	Of SIR developed from PIR.

ART 1.3.3 CONDUCT TACTICAL RECONNAISSANCE

1-26. To obtain, by visual observation or other detection methods, such as signals, imagery, measurement of signature or other technical characteristics, human interaction and other detection methods about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics and the indigenous population of a particular area. This task includes the conduct of NBC reconnaissance and the tactical aspects of SOF special reconnaissance. (FM 3-90) (USACAC)

Note: This task branch includes techniques by which ART 1.1.4.1 (Collect Police Information) may be performed.

No.	Scale	Measure
01	Yes/No	The SIR that prompted the conduct of reconnaissance was answered.
02	Yes/No	Reconnaissance system/force orients on the reconnaissance objective.
03	Yes/No	Recon system/force reports all information rapidly and accurately.
04	Yes/No	Recon mission completed no later than time specified in the order.
05	Yes/No	Support requirements for each reconnaissance asset are identified.
06	Yes/No	Unit maintains continuous reconnaissance by employing multiple means.
07	Time	From receipt of tasking until reconnaissance assets are in place.
08	Time	To provide answers to IR/PIR to requesting agency.
09	Time	To redirect reconnaissance assets to meet new collection requirements.
10	Percent	Of SIR developed from PIR.
11	Percent	Of collection requirements fulfilled by reconnaissance assets.
12	Percent	Accuracy of data provided.
13	Percent	Of collection requirements satisfied using Intelligence Reach.
14	Percent	Of reconnaissance assets mission capable.
15	Percent	Of reconnaissance assets becoming casualties during the mission.

ART 1.3.3.1 CONDUCT A ZONE RECONNAISSANCE

1-27. Conduct a directed effort to obtain detailed information about all routes, obstacles (to include NBC contamination), terrain, and enemy forces within an area defined by boundaries. The commander normally assigns a zone reconnaissance when the enemy situation is vague or when information concerning cross-country trafficability is desired. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Zone reconnaissance accomplishes its task or mission, such as finding, and reporting all enemy forces within the designation area, clearing all enemy forces in the designated AO within the capability of the unit conducting reconnaissance, etc.
02	Yes/No	Reconnaissance force orients on the reconnaissance objective.
03	Yes/No	Reconnaissance force reports all information rapidly and accurately.
04	Yes/No	Reconnaissance force retains its freedom to maneuver.
05	Yes/No	Reconnaissance force gains and maintains enemy contact.
06	Yes/No	Reconnaissance force rapidly develops the situation.
07	Yes/No	Report zone reconnaissance tasks not accomplished to higher headquarters.
08	Yes/No	AO that defines the zone cleared of all enemy forces within the capability of the unit conducting the zone reconnaissance.
09	Yes/No	Complete zone reconnaissance mission no later than time specified in the order.
10	Time	From receiving task until unit reconnaissance assets are in place.
11	Time	To provide collected data to tasking agency analysts.
12	Time	To redirect reconnaissance assets to meet new collection requirements.
13	Time	From receiving task until completing zone reconnaissance.

No.	Scale	Measure
14	Percent	Of assigned zone reconnaissance tasks fulfilled by reconnaissance assets.
15	Percent	Of tactical-level collection requirements satisfied by piggybacking on existing collection missions on a noninterference basis.
16	Percent	Of accuracy of data provided.
17	Percent	Of zone reconnaissance assets mission capable.
18	Percent	Of reconnaissance assets becoming casualties during the mission.

ART 1.3.3.2 CONDUCT AN AREA RECONNAISSANCE

1-28. Conduct a directed effort to obtain detailed information concerning the terrain or enemy activity within a prescribed area not defined by boundaries, such as a town, ridgeline, woods, or other feature critical to operations. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Area reconnaissance accomplishes its task or mission, such as finding, and reporting all enemy forces within the designation area, clearing all enemy forces in the designated AO within the capability of the unit conducting reconnaissance, etc.
02	Yes/No	Reconnaissance force orients on the reconnaissance objective.
03	Yes/No	Reconnaissance force reports all information rapidly and accurately.
04	Yes/No	Reconnaissance force retains its freedom to maneuver.
05	Yes/No	Reconnaissance force gains and maintains enemy contact.
06	Yes/No	Reconnaissance force rapidly develops the situation.
07	Yes/No	Report area reconnaissance tasks not accomplished to higher headquarters.
08	Yes/No	AO that defines the area cleared of all enemy forces within the capability of the unit conducting the area reconnaissance.
09	Yes/No	Complete area reconnaissance mission no later than time specified in the order.
10	Time	From receiving task until placing unit reconnaissance assets.
11	Time	To provide collected data to tasking agency analysts.
12	Time	To redirect reconnaissance assets to meet new collection requirements.
13	Time	From receiving task until completing area reconnaissance.
14	Percent	Of assigned area reconnaissance tasks fulfilled by reconnaissance assets.
15	Percent	Of tactical-level collection requirements satisfied by piggybacking on existing collection missions on a noninterference basis.
16	Percent	Of accuracy of data provided.
17	Percent	Of area reconnaissance assets mission capable.
18	Percent	Of reconnaissance assets becoming casualties during the mission.

ART 1.3.3.3 CONDUCT A RECONNAISSANCE-IN-FORCE

1-29. A reconnaissance-in-force is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions, or obtain other information. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Reconnaissance-in-force accomplishes its task or mission, such as penetrating the enemy's security area and determining its size and depth, determining the location and disposition of enemy main positions, etc.
02	Yes/No	Unit conducting the reconnaissance-in-force remains oriented on the reconnaissance objective.
03	Yes/No	Unit conducting the reconnaissance-in-force reports all information rapidly and accurately to its higher headquarters.
04	Yes/No	Unit conducting the reconnaissance-in-force retains its freedom to maneuver.
05	Yes/No	Unit conducting the reconnaissance-in-force gains and maintains enemy contact.
06	Yes/No	Unit conducting the reconnaissance-in-force rapidly develops the situation.
07	Yes/No	Report reconnaissance-in-force tasks not accomplished to higher headquarters.
08	Yes/No	Unit completes the reconnaissance-in-force no later than time specified in the order.
09	Yes/No	Collect desired information during the reconnaissance-in-force; make it available to the commander.
10	Time	From receiving task until placing unit starts the reconnaissance-in-force.
11	Time	To provide collected data to tasking agency analysts.
12	Time	To redirect reconnaissance assets to meet new collection requirements.
13	Time	From receiving task until completing reconnaissance-in-force.
14	Percent	Of doctrinal reconnaissance-in-force tasks fulfilled by reconnaissance assets.
15	Percent	Of tactical-level collection requirements satisfied by piggybacking on existing collection missions on a noninterference basis.
16	Percent	Of accuracy of data provided.
17	Percent	Of unit assets mission capable at different points during the reconnaissance-in-force mission—beginning, end, and critical times.
18	Percent	Of unit assets becoming casualties during the mission.

ART 1.3.3.4 CONDUCT A ROUTE RECONNAISSANCE

1-30. Conduct a reconnaissance operation focused along a specific line of communication—such as a road, railway, or waterway—to provide new or updated information on route conditions and activities. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Route reconnaissance accomplishes its assigned task or mission, such as finding, reporting, and clearing within force capabilities all enemy forces that can influence movement along the route, determining the trafficability of the route, etc.
02	Yes/No	Reconnaissance force orients on the reconnaissance objective.
03	Yes/No	Reconnaissance force reports all information rapidly and accurately.
04	Yes/No	Reconnaissance force retains its freedom to maneuver.
05	Yes/No	Reconnaissance force gains and maintains enemy contact.
06	Yes/No	Reconnaissance force rapidly develops the situation.
07	Yes/No	Report route reconnaissance critical tasks not accomplished to higher headquarters.
08	Yes/No	Completed route reconnaissance mission no later than time specified in the order.
09	Yes/No	Collect information during the route reconnaissance; make it available to the commander.
10	Time	From receiving task until placing unit reconnaissance assets to start the mission.
11	Time	To provide collected route data to tasking agency analysts.
12	Time	To redirect reconnaissance assets to meet new collection requirements.
13	Time	From receiving task until completing route reconnaissance.
14	Percent	Of route reconnaissance critical tasks fulfilled by reconnaissance assets.
15	Percent	Of route reconnaissance collection requirements satisfied by piggybacking on other existing collection missions on a noninterference basis.
16	Percent	Of accuracy of data provided.
17	Percent	Of operational assets committed to the route reconnaissance mission.
18	Percent	Of reconnaissance assets becoming casualties during the mission.

ART 1.3.3.5 CONDUCT A RECONNAISSANCE PATROL

1-31. Use a detachment of ground, sea, or air forces to gather information about the enemy, terrain, or civil environment. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Patrol collects the information required.
02	Yes/No	Prepare patrol plan within time allowed.
03	Yes/No	Conduct rehearsals to standard within the time allowed.
04	Yes/No	Patrol uses tactically appropriate reconnaissance method—fan, converging route, or successive sector.
05	Yes/No	Enemy detects reconnaissance patrol.
06	Time	To conduct the reconnaissance patrol within time allocated by higher headquarters.
07	Percent	Of assigned area covered during the patrol.

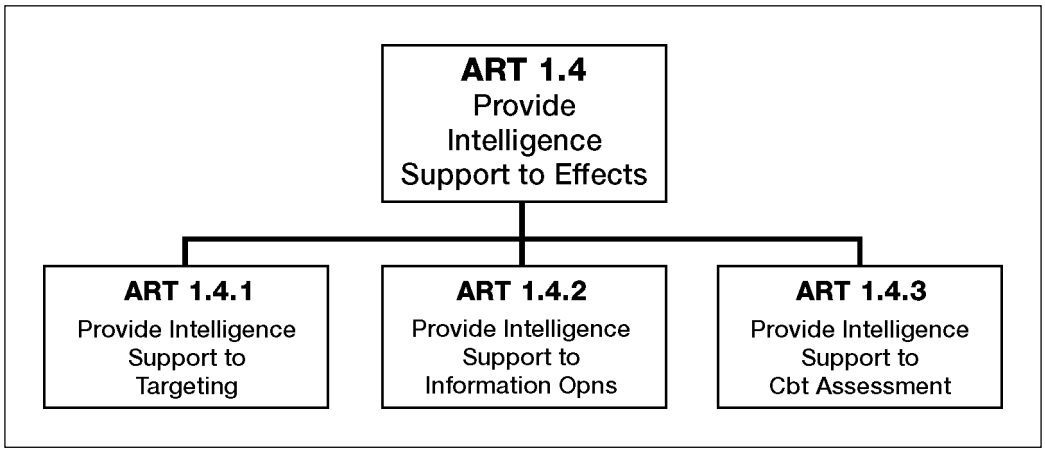
No.	Scale	Measure
08	Percent	Of reconnaissance patrol collection requirements satisfied by piggybacking on other existing ongoing activities on a noninterference basis.
09	Percent	Of accuracy of data provided.
10	Percent	Of friendly casualties received during the combat patrol.
11	Percent	Of information requirements achieved.

ART 1.3.4 CONDUCT SURVEILLANCE

1-32. To systematically observe the airspace, surface, or subsurface areas, places, persons, or things in the AO by visual, aural (audio), electronic, photographic, or other means. Other means may include but are not limited to space-based systems, and using special NBC, artillery, engineer, SOF and air defense equipment. (FM 3-90) (USACAC)

Note: This task is a technique by which ART 1.1.4.1 (Collect Police Information) may be performed.

No.	Scale	Measure
01	Yes/No	Surveillance assets collected required information.
02	Yes/No	Surveillance asset support requirements are identified.
03	Yes/No	Enemy forces detect surveillance asset.
04	Yes/No	Fulfill the duration of the surveillance until the PIR is answered or the information is no longer of value.
05	Time	From tasking until surveillance assets can begin surveillance mission.
06	Time	To respond to new taskings.
07	Time	To provide collected data to tasking agency analysts.
08	Time	Required to provide answers to information requirements, PIR, and FFIR to requesting agency.
09	Percent	Of time able to respond to collection requirements.
10	Percent	Of collection requirements fulfilled by reconnaissance assets.
11	Percent	Of surveillance requirements satisfied using Intelligence Reach.
12	Percent	Of surveillance assets mission capable.
13	Percent	Of surveillance assets becoming casualties during the mission.



SECTION IV – ART 1.4: PROVIDE INTELLIGENCE SUPPORT TO EFFECTS

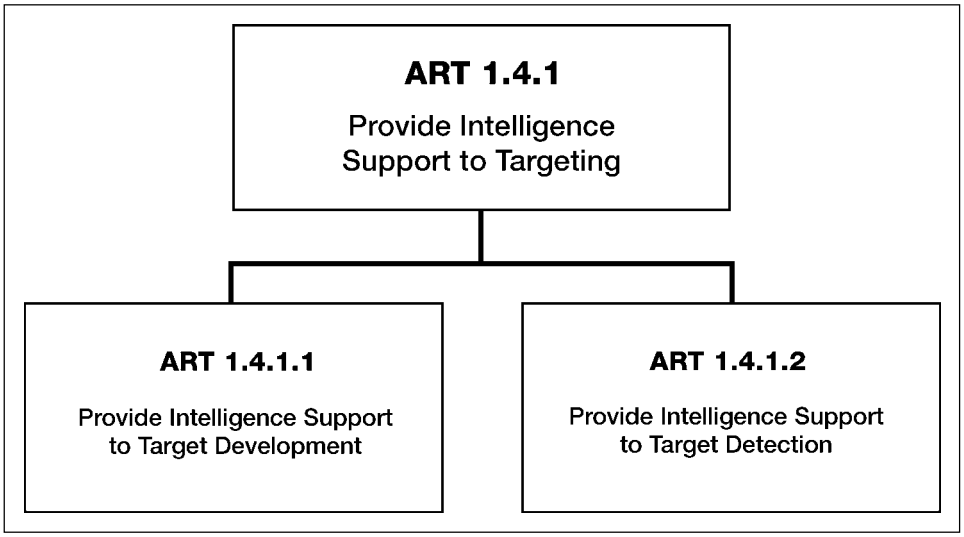
1-33. The task of providing the commander information and intelligence support for targeting of the threat's forces, threat organizations, units and systems through lethal and non-lethal fires to include electronic attack and information operations. (FM 34-1) (USAIC&FH)

Note: This task branch supports both direct (ART 2.4, Conduct Direct Fires) and indirect (ART 3.3, Employ Fires to Influence the Will and Destroy, Neutralize, or Suppress Enemy Forces) delivery of fires.

No.	*Scale*	*Measure*
01	Yes/No	Targets for lethal and nonlethal attack are identified, prioritized and nominated.
02	Yes/No	Determined whether lethal, nonlethal, or a combination of lethal and non-lethal fires will achieve the best effect.
03	Yes/No	Lethal and non-lethal targets linked to specific sensors and included in the ISR plan.
04	Yes/No	Identification of ISR assets that can be retasked by the G3/S3 to acquire new lethal or non-lethal targets in accordance with the commander's targeting priorities.
05	Time	To identify and submit collection requirements for lethal and nonlethal effects and for battle damage assessment.
06	Time	To perform BDA assessments to identify if targets achieved the desired effects or require reattack.
07	Time	To develop, maintain, and update databases.

ART 1.4.1 PROVIDE INTELLIGENCE SUPPORT TO TARGETING

1-34. The intelligence officer, supported by the entire staff, provides the commander information and intelligence support for targeting of the threat's forces and systems through the employment of direct and indirect lethal and nonlethal fires. It includes identification of threat capabilities and limitations. (FM 34-1) (USAIC&FH).



Note: This task branch supports ART 3.2, Detect and Locate Surface Targets, and is a byproduct of the decide, detect, deliver, and assess (D3A) process.

No.	Scale	Measure
01	Yes/No	Identify enemy C2 nodes.
02	Yes/No	Identify enemy communications systems.
03	Yes/No	Identify enemy computer systems.
04	Percent	Of enemy C2 nodes vulnerable to electronic attack.
05	Percent	Of enemy computer systems vulnerable to computer network attack.
06	Percent	Of enemy C2 nodes disrupted/degraded.
07	Percent	Of enemy computer systems compromised.

ART 1.4.1.1 PROVIDE INTELLIGENCE SUPPORT TO TARGET DEVELOPMENT

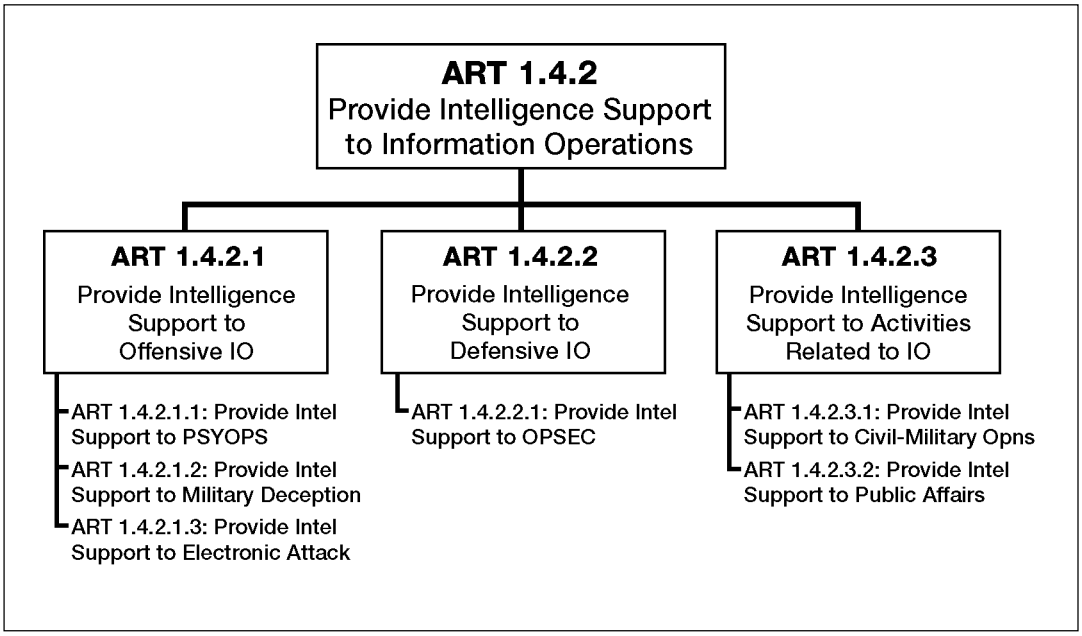
1-35. The systematic analysis of enemy forces and operations to determine high-value targets (HVT), systems, and system components for potential attack through maneuver, fires, or information. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Target critical components developed on high payoff targets.
02	Yes/No	Critical components passed to commander in sufficient time to engage targets.
03	Yes/No	Offensive IO requirements are integrated into the target development process.
04	Time	To develop target list and perform target system analysis, critical components, vulnerability assessment, and target validation based on commander's guidance.
05	Time	To identify, prioritize, and nominate targets for attack.
06	Percent	Of targeted system vulnerabilities identified correctly.
07	Number	Of correctly identified critical components in targeted system.

ART 1.4.1.2 PROVIDE INTELLIGENCE SUPPORT TO TARGET DETECTION

1-36. The intelligence officer establishes procedures for dissemination of targeting information. The targeting team develops the sensor/attack system matrix to determine the sensor required to detect and locate targets. The intelligence officer places these requirements into the integrated ISR plan. (FM 34-1) (USAIC&FH)

No.	*Scale*	*Measure*
01	Yes/No	Targets linked to specific sensors for near real time targeting and included in the integrated ISR plan.
02	Yes/No	Targets and sensors included in the sensor/attack system matrix.
03	Yes/No	Targeting information disseminated to attack systems.
04	Time	For sensor to pass targeting data to attack system.
05	Percent	Of targets linked to sensor/attack system.



ART 1.4.2 PROVIDE INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS

1-37. Information operations (IO) are actions taken to affect adversary information, influence others' decision making processes, and information systems while protecting one's own information and information systems. (FM 34-1) (USAIC&FH)

Note: This task branch only address those intelligence tasks that support the conduct of information operations. The actual conduct of Offensive Information Operations, Defensive Information Operations, and Activities Related to Information Operations are tasks addressed elsewhere in the AUTL:

- ART 3.3.2, Conduct Nonlethal Fire Support/Offensive Information Operations addresses the conduct of offensive information operations.
- ART 5.3.7, Conduct Defensive Information Operations addresses the conduct of defensive information operations.
- ART 5.3.8, Conduct Tactical Counterintelligence addresses the conduct of that particular task which also relates to ART 5.3.7, Conduct Defensive Information Operations.
- ART 6.14, Conduct Civil-Military Operations in an AO, is one activity related to information operations.
- ART 7.10, Conduct Public Affairs Operations, is the other activity related to information operations.

No.	Scale	Measure
01	Yes/No	Intelligence support required for IO identified through IPB and support to targeting.
02	Yes/No	Intelligence support linked to specific offensive and defensive IO.
03	Yes/No	Intelligence support identified for each element of IO involved in the operation and integrated into the ISR plan.
04	Yes/No	BDA performed on IO targets and target systems.
05	Time	To determine support required for IO.
06	Time	To determine specific intelligence requirements for IO.
07	Percent	Of IO requirements answered.

ART 1.4.2.1 PROVIDE INTELLIGENCE SUPPORT TO OFFENSIVE INFORMATION OPERATIONS

1-38. The intelligence BOS supports offensive IO by providing information to identify critical enemy C2 nodes. Intelligence also helps identify enemy systems and procedures that may be vulnerable to offensive IO. Additionally, intelligence plays a key role in evaluating and assessing the effectiveness of offensive information operations. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify enemy C2 nodes.
02	Yes/No	Identify enemy communications systems.
03	Yes/No	Identify enemy computer systems.
04	Percent	Of enemy C2 nodes vulnerable to electronic attack.
05	Percent	Of enemy C2 nodes vulnerable to electronic exploitation.
06	Percent	Of enemy computer systems vulnerable to computer network attack.
07	Percent	Of enemy C2 nodes disrupted/degraded.
08	Percent	Of enemy computer systems compromised.

ART 1.4.2.1.1 Provide Intelligence Support to PSYOPS

1-39. This task identifies the cultural, social, economic, and political environment of the AO. It identifies target groups and subgroups and their location, conditions, vulnerabilities, susceptibilities, cultures, attitudes, and behaviors. Psychological operations influence foreign target audiences in the

AO to support achieving the commander's goals in the AO. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Intelligence support required for psychological operations identified through IPB.
02	Yes/No	Intelligence support linked to support the PSYOP plan.
03	Yes/No	Intelligence support provided to identify PSYOP target audience.
04	Yes/No	Intelligence support provided to assess the results of PSYOP.

ART 1.4.2.1.2 Provide Intelligence Support to Military Deception

1-40. This task identifies the capabilities and limitations of the adversary's intelligence gathering systems and identifies adversary biases and perceptions. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify the profiles of key adversary leaders.
02	Yes/No	Outline the adversary decision-making processes, patterns and biases.
03	Yes/No	Identify the adversary perceptions of the military situation in the AO.
04	Yes/No	Identify the capabilities and limitations of adversary CI and security services.

ART 1.4.2.1.3 Provide Intelligence Support to Electronic Attack

1-41. This task supports electronic attack employing jamming, electromagnetic energy, or directed energy against personnel, facilities, or equipment. It identifies critical adversary information systems and command and control nodes. (FM 2-0) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Provide intelligence support to identify targets for electronic attack.
02	Yes/No	Provide intelligence support to determine if desired effects were achieved.
03	Yes/No	Provide intelligence information regarding target capabilities and vulnerabilities.
04	Yes/No	Provide intelligence information regarding available systems to conduct electronic attack.

ART 1.4.2.2 PROVIDE INTELLIGENCE SUPPORT TO DEFENSIVE INFORMATION OPERATIONS

1-42. The intelligence BOS supports defensive IO by providing information to identify threat IO capabilities and tactics. Intelligence provides information relating to computer network defense, physical security, operations security, counter-deception, and counterpropaganda. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify enemy offensive information capabilities.
02	Yes/No	Identify friendly emitters that could be exploited by an enemy.

No.	Scale	Measure
03	Percent	Of enemy attempted penetration of friendly information systems that are successful.
04	Percent	Of known enemy sensor coverage in AO.
05	Percent	Of message traffic exploited by the enemy.
06	Percent	Of enemy IO capabilities not covered by operational security (OPSEC) measures.
07	Number	Of enemy offensive IO attempts that disrupt, degrade, or exploit friendly information systems.
08	Time	That enemy offensive IO disrupts, degrades, or exploits friendly information systems.

ART 1.4.2.2.1 Provide Intelligence Support to Operations Security

1-43. This task identifies capabilities and limitations of the adversary's intelligence system to include adversary intelligence objectives and the means, methods and facilities used by the enemy to collect, process, and analyze information. Supports the identification of indicators that adversary intelligence systems might obtain that could be interpreted or pieced together to penetrate essential elements of friendly information (EEFI) in time to be useful to adversaries. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify OPSEC compromises.
02	Time	To provide input to information operations annex of the operation order.
03	Time	To identify potential compromises of essential elements of friendly information in AO.
04	Number	Of adversary sensor coverage in AO known to friendly force.
05	Number	Of successful adversary attempted penetration of friendly information systems.
06	Number	Of encrypted communications in AO.
07	Number	Of OPSEC measures selected tied to vulnerability analysis.
08	Number	Of vulnerabilities tied to specific enemy capabilities by planners.

ART 1.4.2.3 PROVIDE INTELLIGENCE SUPPORT TO ACTIVITIES RELATED TO INFORMATION OPERATIONS

1-44. The intelligence BOS when operating outside US territories supports activities related to IO under some circumstances. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Provide intelligence information to identify population demographics.
02	Yes/No	Provide intelligence support to identify populace attitudes, alliances and behaviors.
03	Yes/No	Provide intelligence support to identify NGOs/international organizations in the AO
04	Yes/No	Provide support identification of resources and capabilities of NGOs/international organizations in the AO.

No.	Scale	Measure
05	Yes/No	Provide intelligence support to identify adversary propaganda and misinformation capabilities.
06	Yes/No	Provide intelligence support to identify the location, biases and agenda of national media representatives in the AO.
07	Yes/No	Provide intelligence support to identify the location, biases and agenda of international media representatives in the AO.
08	Yes/No	Provide intelligence support to identify trends reflected by the national and international media.

ART 1.4.2.3.1 Provide Intelligence Support to Civil-Military Operations

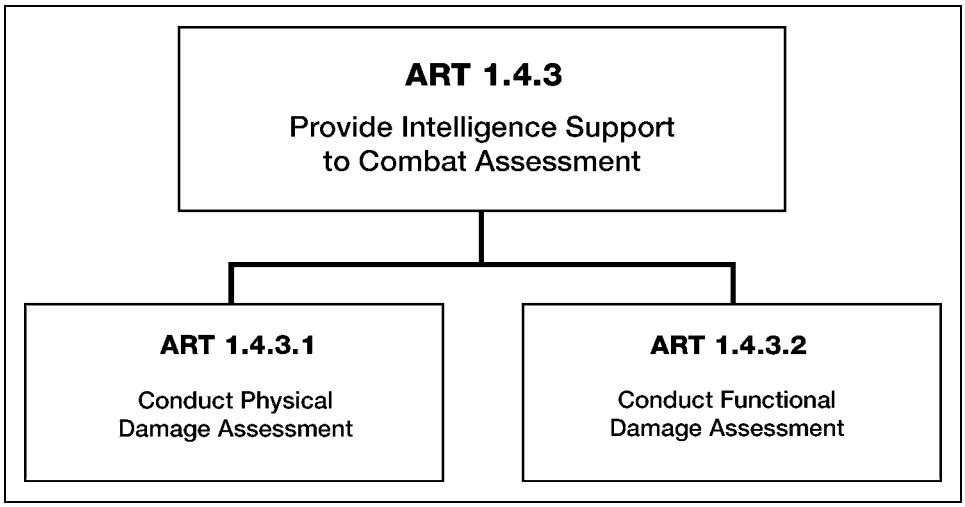
1-45. This task allows military intelligence organizations to collect and provide information and intelligence products concerning foreign cultural, social, economic, and political elements within an AO in support of civil-military operations. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Provide intelligence information to identify population demographics.
02	Yes/No	Provide intelligence support to identify populace attitudes, alliances and behaviors.
03	Yes/No	Provide intelligence support to identify NGOs/international organizations in the AO.
04	Yes/No	Provide support identification of resources and capabilities of NGOs/international organizations in the AO.

ART 1.4.2.3.2 Provide Intelligence Support to Public Affairs

1-46. This task identifies the coalition and foreign public physical and social environment, as well as, world, host nation national, and host nation local public opinion. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Provide intelligence support to identify adversary propaganda and misinformation capabilities.
02	Yes/No	Provide intelligence support to identify the location, biases and agenda of national media representatives in the AO.
03	Yes/No	Provide intelligence support to identify the location, biases and agenda of international media representatives in the AO.
04	Yes/No	Provide intelligence support to identify trends reflected by the national and international media.



ART 1.4.3 PROVIDE INTELLIGENCE SUPPORT TO COMBAT ASSESSMENT

1-47. Intelligence supports the assess phase of the operations process and targeting methodology. The commander uses combat assessment to determine if his targeting actions have met his attack guidance, and if re-attack is necessary to achieve his essential fire support tasks and targeting goals. The staff determines how combat assessment relates to a specific target by conducting physical damage, functional damage and target system assessments. (FM 34-1) (USAIC&FH)

Note: This task branch supports ART 7.3, Assess the Tactical Situation and Operations, and ART 7.3.3.1, Conduct Battle Damage Assessment. It is also associated with the decide, detect, deliver, and assess (D3A) process.

No.	Scale	Measure
01	Time	To commence follow-on operations or re-attack.
02	Time	To make initial assessment of attacks after TOT.
03	Time	To provide initial assessment of attack effects to force commander.
04	Time	To complete full assessment of attack effects after TOT.
05	Time	To provide full assessment of attacks to force commander.
06	Percent	Of HPTs correctly assessed to meet attack guidance.

ART 1.4.3.1 CONDUCT PHYSICAL DAMAGE ASSESSMENT

1-48. This task is an estimate of the extent of physical damage to a target based upon observed or interpreted damage. It is a post-attack target analysis that is a coordinated effort among all units. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Time	To identify target physical damage.
02	Time	To make initial physical assessment damage.

No.	Scale	Measure
03	Time	To provide initial assessment of attack effects to force commander.
04	Time	To complete full assessment of attack effects after TOT.
05	Time	To provide full assessment of attacks to force commander.
06	Percent	Of targets unnecessarily reattacked.
07	Percent	Of HPTs correctly assessed as combat ineffective.

ART 1.4.3.2 CONDUCT FUNCTIONAL DAMAGE ASSESSMENT

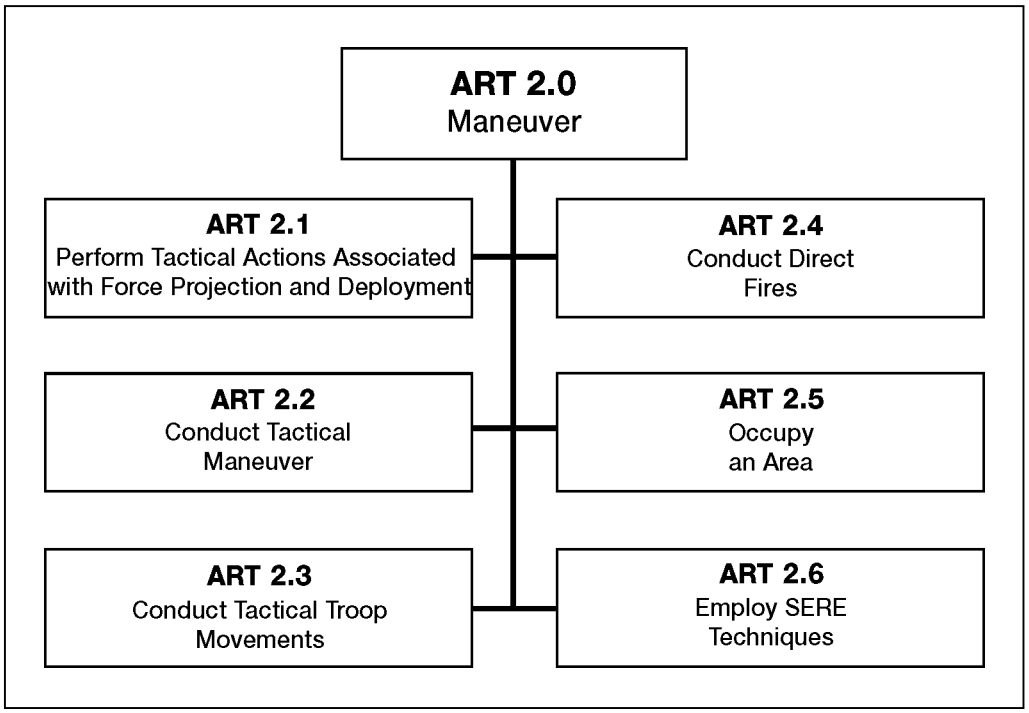
1-49. The functional damage assessment estimates the remaining functional or operational capability of a targeted facility or object. The staff bases the assessment on observed physical damage and estimates the threat's ability to recuperate. The targeting or BDA cell integrates the initial target analyses with other related sources and compares the original objective with the current status of the target to determine if the objective has been met. (FM 34-1) (USAIC&FH)

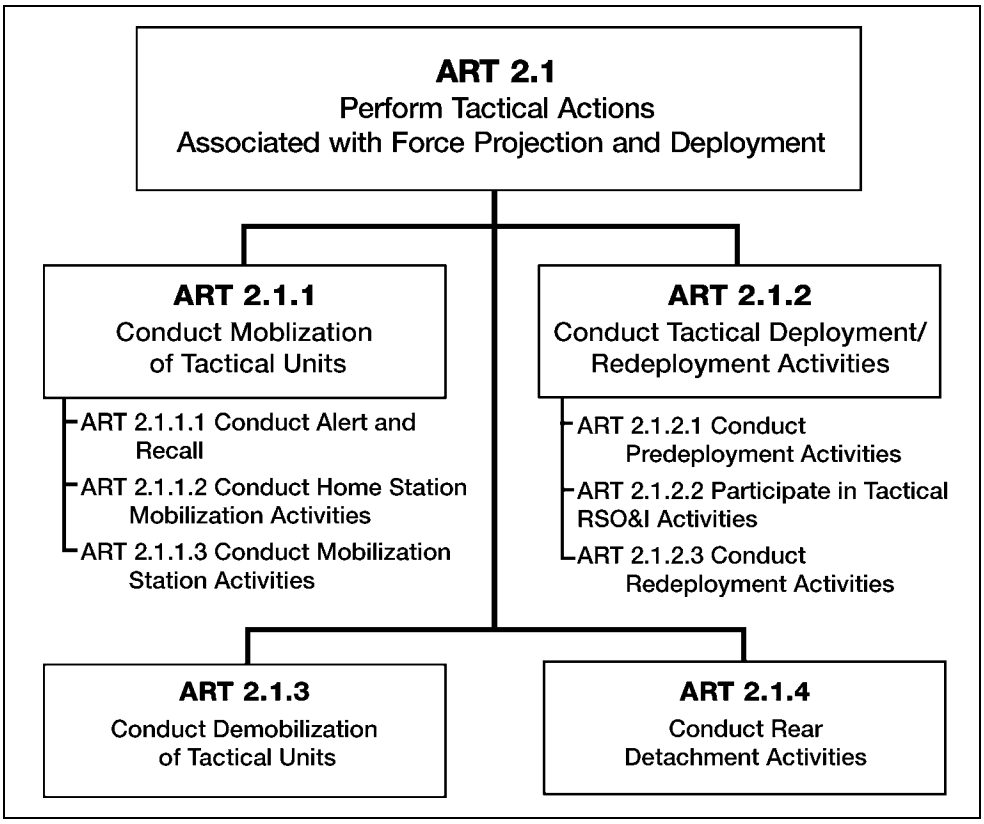
No.	Scale	Measure
01	Time	To identify functional damage assessments.
02	Time	To make initial functional damage assessment of attacks after TOT.
03	Time	To provide initial functional damage assessment of attack effects to force commander.
04	Time	To complete full functional damage assessment of attack effects after TOT.
05	Time	To provide full functional damage assessment of attacks to force commander.
06	Percent	Of targets unnecessarily reattacked.
07	Percent	Of HPTs correctly assessed as combat ineffective.

Chapter 2

ART 2.0: The Maneuver Battlefield Operating System

The maneuver BOS is the movement of forces to achieve a position of advantage with respect to enemy forces. This system includes employing forces in combination with direct fire or fire potential. This system also includes the tactical tasks associated with force projection. It does not include indirect fires, which ART 3.0 includes.





SECTION I – ART 2.1: PERFORM TACTICAL ACTIONS ASSOCIATED WITH FORCE PROJECTION AND DEPLOYMENT

2-1. Force projection is the ability to project the military element of national power from the continental United States (CONUS) or another theater, in response to requirements for military operations. Force projection operations extend from mobilization and deployment of forces to redeployment to CONUS or home theater (JP 3-35). Force projection includes the following five stages: mobilization; deployment; employment; sustainment, and redeployment. Effective force projection retains the capability to (1) mobilize, deploy, and sustain an employed force; (2) redeploy forces to the United States or other locations for missions across the range of military operations; (3) demobilize forces so as to retain the capability for later mobilization. (FM 100-17) (CASCOM-DPMO)

No.	*Scale*	*Measure*
01	Yes/No	The unit deploys from its current location to the AO in accordance with the time-phased force deployment list (TPFDL).
02	Time	To complete unit mobilization.
03	Time	To complete required training before employment in theater of operations.
04	Time	To determine available transportation infrastructure and resources.

No.	Scale	Measure
05	Time	To deploy unit from home or mobilization station to theater of operations.
06	Time	To redeploy unit from theater of operations to home station or another theater.
07	Percent	Of combat effectiveness of unit when employed in a theater of operations.

ART 2.1.1 CONDUCT MOBILIZATION OF TACTICAL UNITS

2-2. Mobilization is the process by which Army tactical forces or part of them are brought to a state of readiness for war or other national emergency. (See JP 1-02 for a complete definition.) It includes activating all or part of the reserve components as well as assembling and organizing personnel, supplies, and materiel. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	Unit was brought to its planned state of readiness within the specified time.
02	Yes/No	Unit mobilization progress monitored by higher headquarters.
03	Time	Between planned and actual unit arrival time at mobilization station.
04	Time	To process reserve component unit through its mobilization station or CONUS replacement center.
05	Percent	Of key personnel reporting within planning timelines.
06	Percent	Of alert and activation messages, dispatched within timelines.
07	Percent	Of required initial mobilization reports submitted on time.

ART 2.1.1.1 CONDUCT ALERT AND RECALL

2-3. Units and individuals receive mobilization/alert orders, individuals assigned to the unit are notified of the situation, and all individuals report to the designated location at the designated time with designated personal items. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	Unit musters its assigned personnel at the designated location within the designated time.
02	Yes/No	Unit alert and recall progress reported to and monitored by higher headquarters.
03	Time	For notified units to identify and report preliminary list of deployable and nondeployable personnel.
04	Percent	Of key personnel reported within planning timelines.
05	Percent	Of alert message dispatched within timelines.
06	Percent	Of alert messages returned for incomplete or inaccurate addresses.
07	Percent	Of notified units able to alert all of their personnel within 24 hours.

ART 2.1.1.2 CONDUCT HOME STATION MOBILIZATION ACTIVITIES

2-4. This task involves the activities of reserve component units at home station after receiving a mobilization order followed by entry onto federal active duty or other command and control changes. It includes taking action to speed transition to active duty status, such as identifying shortages of critical personnel and equipment. Task activities include inventorying unit property, dispatching an advance party to the mobilization station, and loading the unit on organic equipment or designated carriers. Movement is coordinated with the state area command (STARC) defense movement coordinator, unit movement coordinator, installation transportation offices, and Military Traffic Management Command (MTMC). (FM 100-17) (CASCOM-DPMO)

No.	*Scale*	*Measure*
01	Yes/No	Unit deploys to its mobilization station according to its mobilization timetable.
02	Yes/No	Unit home station mobilization activities reported to and monitored by higher headquarters.
03	Time	To activate key unit personnel.
04	Time	To conduct preparatory administrative, logistic, medical, and readiness activities.
05	Time	To submit initial mobilization reports.
06	Percent	Of key personnel reported within planning timelines.
07	Percent	Of initial mobilization reports, submitted on time.

ART 2.1.1.3 CONDUCT MOBILIZATION STATION ACTIVITIES

2-5. This task encompasses actions required to meet deployment or other unit validation criteria. It results in assuring the unit's mission capability. Reserve component unit members transition to active duty. The commander conducts necessary individual and collective training that may vary as evaluations and circumstances dictate. Personnel complete preparation for overseas movement. Soldiers prepare equipment for deployment. Mobilization station commanders verify training and processing completed at home station to preclude repeating it. Depending on the situation, units may move through a mobilization site rather than a mobilization station. (FM 100-17) (CASCOM-DPMO)

No.	*Scale*	*Measure*
01	Yes/No	Unit meets deployment or other unit validation criteria within established mobilization timetables.
02	Yes/No	Unit home station mobilization activities reported to and monitored by higher headquarters.
03	Time	To assemble unit and report status.
04	Time	To conduct specified training.
05	Time	To requisition mobilization station training and support requirements.
06	Time	To transfer home station property and prepare for movement to the mobilization station.
07	Percent	Of specified training completed.

No.	Scale	Measure
08	Percent	Of required mobilization station training and support requirements requisitioned.
09	Percent	Of home station property transferred to the appropriate agency.

ART 2.1.2 CONDUCT TACTICAL DEPLOYMENT/REDEPLOYMENT ACTIVITIES

2-6. Deployment is composed of activities required to prepare and move forces, and sustainment equipment and supplies within a theater of operations. This task involves the force as it task organizes, echelons, and tailors itself for movement based on the mission, concept of operations, available lift, and other resources. Redeployment is transferring forces and materiel to support another joint force commander's operational requirements, or to return personnel, equipment, and materiel to the home and/or demobilization stations for reintegration and/or out-processing. Redeployment optimizes readiness of redeploying forces and materiel to meet new contingencies or crises. (FM 100-17) (CASCOM-DPMO)

Notes: ART 2.3.1.1 (Conduct Advance Party Activities) and ART 2.3.1.2 (Conduct Quartering Party Activities) address tasks also associated with deployments and redeployments.

- Three phases of deployment/redeployment are tasks addressed elsewhere in the AUTL:
- ART 6.3.3.2 (Move by Air) addresses strategic lift.
- ART 2.3.2 (Conduct Administrative Movement) addresses movement of deploying/redeploying units to air/sea ports of embarkation.
- ART 2.3 (Conduct Tactical Troop Movement) addresses onward movement.

No.	Scale	Measure
01	Yes/No	Unit loads its designated operational/strategic lift systems in accordance with the force deployment plans.
02	Yes/No	Unit conducted a LOADEX of its vehicles and equipment to include containers, and garrison close out procedures (if applicable) prior to developing and inputting data into automated deployment systems, such as TC-ACCIS, AUEL, and TPFDD database of GCCS-A.
03	Time	To task organize the unit based on mission, concept of operations, available lift, and other resources.
04	Time	To echelon the unit based on mission, concept of operations, available lift, and other resources.
05	Time	To tailor the unit based on mission, concept of operations, available lift, and other resources.
06	Percent	Of available lift resources lost awaiting arrival and loading of unit.

No.	Scale	Measure
07	Percent	Of unit not closed on port of debarkation (POD) by scheduled date and time.
08	Percent	Of available lift needed to move unit configured for tactical application not required to move unit administratively.

ART 2.1.2.1 CONDUCT PREDEPLOYMENT ACTIVITIES

2-7. Predeployment activities include planning and preparing for deployment. They include updating unit deployment information for input into command and control (C2) and Standard Army Maintenance Information System (STAMIS) including Global Command and Control System-Army (GCCS-A), the automated unit equipment list (AUEL), the transportation coordinator's automated command and control information system (TC-ACCIS), and the transportation coordinator's automated information for movement system II (TC-AIMS II). Units update and obtain maps, update databases, organizational structures, and networks to support the Army Battle Command System (ABCS). Updated information affects the Joint Operation Planning and Execution System (JOPES), the time-phased force and deployment data (TPFDD), and the TPFDL. Tasks include maintaining the AUEL; updating AUEL data to become the deployment equipment list; and writing radio frequency tags for unit vehicles, containers, and other critical pieces of equipment to achieve in transit visibility of these items. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	Unit loads its designated operational/strategic lift systems in accordance with the force deployment plans.
02	Yes/No	Unit conducted a LOADEX of its vehicles and equipment to include containers, and garrison close out procedures (if applicable) prior to developing and inputting data into automated deployment systems, such as TC-ACCIS, AUEL, and TPFDD database of GCCS-A.
03	Time	To cross level and redistribute personnel and equipment.
04	Time	To train to minimum operationally ready status.
05	Time	To evaluate unit for deployment.
06	Time	To secure clearance for a non-validated unit prior to its deployment.
07	Time	To integrate unit movement information into automated transportation information systems and other command and control systems such as TC-AIMS II and JOPES.
08	Percent	Of required base and operations support, such as training areas, ranges, and ammunition received by deploying unit.
09	Percent	Of mission essential and other required tasks performed to standard.

ART 2.1.2.2 PARTICIPATE IN TACTICAL RECEPTION, STAGING, ONWARD MOVEMENT, AND INTEGRATION ACTIVITIES

2-8. This task involves unit reception at the POD. It includes drawing equipment from pre-positioned stocks. This task begins when the first strategic lift system of the main body arrives at the POD. It ends when adequate equipment and supplies are discharged and issued, unit tactical command and control systems are operational, units have moved from the

port to tactical assembly areas, and units are combat ready. (FM 100-17) (CASCOM-DPMO)

Note: This task describes the Army's contribution toward the UJTL task of Conduct Joint Reception, Staging, Onward Movement, and Integration (JSROI) in a Joint Operations Area (JOA) (OP 1.1.3).

No.	*Scale*	*Measure*
01	Yes/No	Unit is combat ready and in a tactical assembly area in accordance with deployment plans.
02	Yes/No	PODs are efficiently and effectively used with no noticeable delay in the throughput of forces into theater.
03	Time	To discharge cargo from ship in a logistics over-the-shore situation.
04	Time	To clear aerial port of debarkation (APOD) of aircraft cargo.
05	Time	To clear APOD of chalk's personnel.
06	Time	To clear seaport of debarkation (SPOD) of ship's cargo.
07	Time	To clear SPOD of personnel landing administratively.
08	Time	Ship remains in vicinity of port awaiting discharge of cargo.
09	Time	To clear frustrated cargo from POD.
10	Time	To match personnel arriving by air with equipment arriving by sea.
11	Time	To match personnel arriving by air with pre-positioned equipment.
12	Time	To begin unloading ships on arrival in theater.
13	Time	To accomplish linkup of personnel and equipment.
14	Time	For unit to be en route to final destination from staging area or POD.
15	Percent	Of throughput actually achieved.
16	Percent	Of POD capability within the theater used for the reception of forces.
17	Percent	Of transportation assets available for onward movement to staging area or destination.
18	Percent	Of time airfield is in the maximum on ground category.
19	Percent	Of unit personnel and equipment assembled when transferred to tactical commander.
20	Number	Of personnel per day moved by host-nation support to marshaling areas.

ART 2.1.2.3 CONDUCT REDEPLOYMENT ACTIVITIES

2-9. This task involves the unit moving to assembly areas and beginning recovery and reconstitution. The commander rebuilds unit integrity and accounts for personnel, equipment, and supplies. The unit develops movement data, washes equipment, goes through customs and Department of Agriculture inspections, prepares documentation, and plans movement. At the port, the unit processes personnel and equipment for strategic lift. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	Unit loads its personnel and equipment on strategic/operational lift systems in accordance with the redeployment plan.
02	Time	To determine lift and security requirements.
03	Time	To select routes and assembly areas.
04	Time	To deploy transportation and security forces.
05	Time	To prepare movement orders.
06	Time	To close unit into designated assembly areas.
07	Time	To integrate unit movement information into automated transportation information systems and other command and control systems such as TC-AIMS II and JOPES.
08	Time	For unit to prepare equipment for shipment back to home station, depot, or future duty location.
09	Time	For unit to prepare personnel for return to home station or future duty assignment to include the conduct of individual health assessments.
10	Time	To pass command authority of in-transit forces.
11	Percent	Of movement orders requiring revision.
12	Percent	Of unit personnel and equipment that move as scheduled to designated ports of embarkation (POE).
13	Percent	Of unit equipment and supplies remaining in theater properly accounted for within supply system.
14	Percent	Of available transportation systems used.

ART 2.1.3 CONDUCT DEMOBILIZATION OF TACTICAL UNITS

2-10. Demobilization is the act of returning the force and materiel to a premobilization or other approved posture. Demobilization actions occur in the AO, between the POE and demobilization station or POE and CONUS demobilization center, at the demobilization station and CONUS demobilization center, and at home station or home of record. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	Demobilize unit personnel, equipment, and supplies in accordance with plans.
02	Yes/No	Maintain accountability of property and personnel.
03	Time	To prepare unit equipment and supplies for movement (includes cleaning, maintenance, and configuring vehicles for movement by removing canvas tarps, folding down windows, etc.).
04	Time	To move demobilizing organization from its current location to demobilization station.
05	Time	Between planned and actual unit arrival time at home station/demobilization station.
06	Time	To process reserve component unit through the demobilization station.
07	Time	To prepare for the transfer of table of organization & equipment (TOE) equipment and supplies to appropriate storage location.

No.	Scale	Measure
08	Time	To conduct individual demobilization administrative, logistic, medical, and finance activities.
09	Time	To transfer home station property back to the unit.
10	Time	To terminate outstanding contracts.
11	Percent	Of TOE equipment and supplies transferred to temporary or permanent storage locations.
12	Percent	Of home station property transferred back to the unit.
13	Percent	Of outstanding contracts to terminate.
14	Percent	Of individual demobilization administrative, logistic, medical, and finance activities completed.

ART 2.1.4 CONDUCT REAR DETACHMENT ACTIVITIES

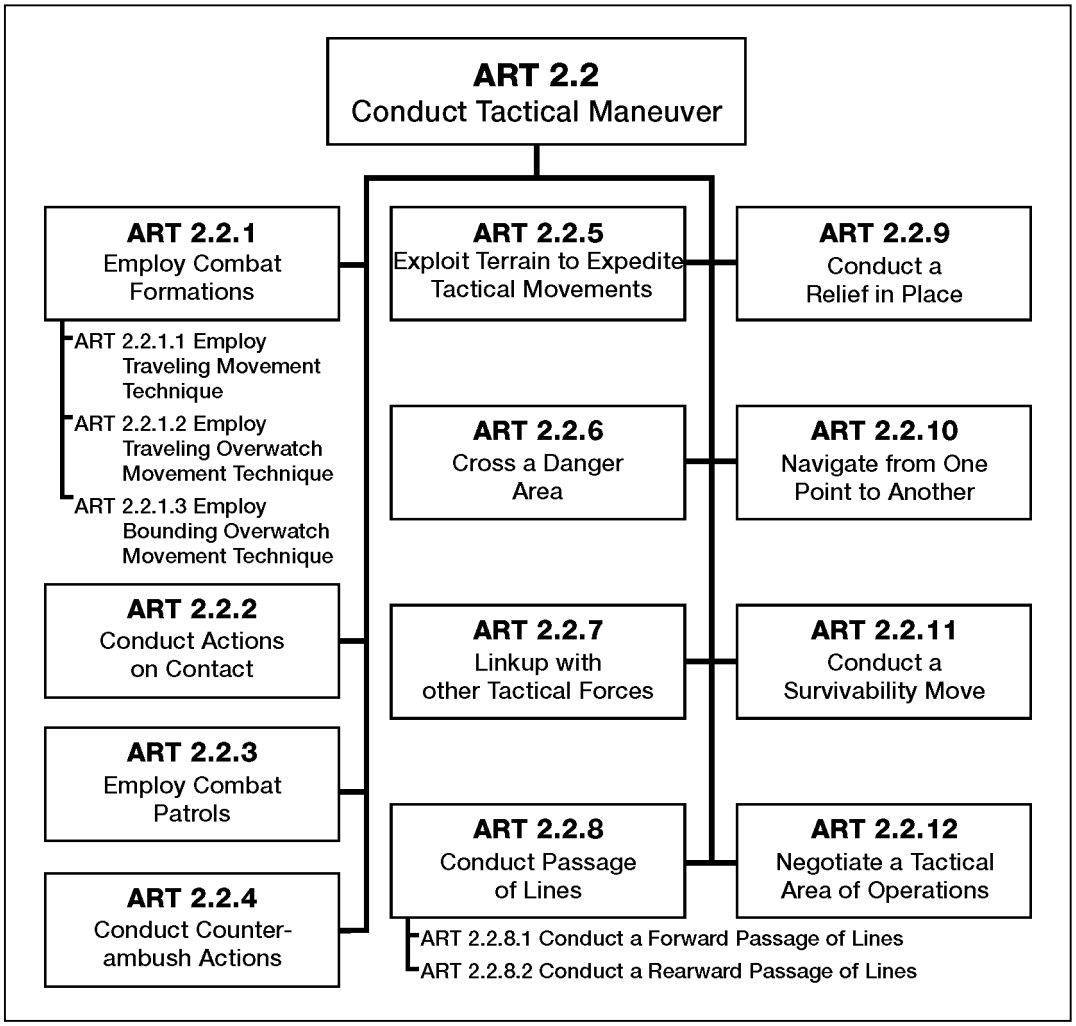
2-11. Rear detachment activities use nondeployable and other personnel to maintain facilities and equipment at home station when the deployed force is expected to return. It includes supporting families of deployed personnel. This task includes turning over residual equipment/supplies and facilities to appropriate authorities (for example, the mobilization station commander) if the unit does not return to the mobilization station. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	Unit family members continue to receive authorized support, assistance, and counseling during operational deployments of service members.
02	Yes/No	Maintain and account for unit installation property and equipment throughout the unit's deployment.
03	Yes/No	Establish rear detachment program prior to the beginning of deployment activities.
04	Time	To turn over residual equipment/supplies and facilities to appropriate authorities when the unit will not return to home or mobilization station.
05	Time	To conduct rear detachment administrative and logistical activities.
06	Time	To establish a functioning family support group.
07	Percent	Of rear detachment administrative and logistical reports, submitted on time.
08	Percent	Of residual equipment/supplies and facilities turned over to appropriate authorities when unit will not return to home or mobilization station.
09	Time	To provide quality and meaningful assistance to unit family members during times of need and support.

SECTION II – ART 2.2: CONDUCT TACTICAL MANEUVER

2-12. Maneuver is the employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission (JP 3-

0). Commanders take full advantage of terrain and combat formations when maneuvering their forces. (FM 3-90) (USACAC)



No.	*Scale*	*Measure*
01	Yes/No	Unit achieves a position of advantage with respect to the enemy.
02	Yes/No	Subordinate commanders use their initiative to achieve the commander's intent when the plan is no longer applicable.
03	Time	To initiate maneuver.
04	Time	To complete maneuver.
05	kph	Rate of movement across the battlefield.
06	Percent	Of forces achieving position of advantage after executing the plan.
07	Percent	Of enemy force destroyed/neutralized by the maneuver of the friendly force.

ART 2.2.1 EMPLOY COMBAT FORMATIONS

2-13. Use an ordered arrangement of troops and vehicles for a specific purpose. Commanders use one of seven different combat formations, depending on the factors of METT-TC: column, line, echelon (left or right), box, diamond, wedge, and vee. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Combat formation reflects the existing factors of METT-TC.
02	Yes/No	Unit complies with all graphic control measures.
03	Yes/No	Unit employs the movement formation ordered by the leader.
04	Time	To plan and prepare operation order.
05	Time	To initiate movement.
06	Time	To complete movement.
07	Percent	Of AO observed during reconnaissance conducted prior to starting operations.
08	Percent	Of allocated forces in place at the start of the plan.
09	Percent	Of unit in designated combat formation throughout the movement.
10	Percent	Of unit moving on the specified route or axis.
11	Percent	Of casualties to the force occurring during the operation.
12	kph	Rate of movement.

ART 2.2.1.1 EMPLOY TRAVELING MOVEMENT TECHNIQUE

2-14. All unit elements move simultaneously. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Combat formation reflects the existing factors of METT-TC.
02	Yes/No	Unit complies with all graphic control measures.
03	Yes/No	Unit employs the movement formation ordered by the leader.
04	Yes/No	Unit commander does not expect to encounter the enemy.
05	Yes/No	All subordinate elements of the unit assigned areas of responsibility for observation during the movement.
06	Yes/No	Unit leaders ensure all-round coverage of the unit for observation and fire, to include air guard.
07	Yes/No	Route of movement offers concealment from enemy ground and air observation, avoids skylining, avoids moving directly forward from firing positions, crosses open areas quickly, avoids possible kill zones, avoids wide open spaces (especially where high ground dominates or where the terrain covers and conceals the enemy), and avoids obvious avenues of approach.
08	Time	To plan and prepare operation order.
09	Time	To initiate movement.
10	Time	To complete movement.
11	Percent	Of allocated forces in place at the start of the plan.
12	Percent	Of unit in designated combat formation throughout the movement.

No.	Scale	Measure
13	Percent	Of unit moving on the specified route or axis.
14	Percent	Of casualties to the force occurring during the operation.

ART 2.2.1.2 EMPLOY TRAVELING OVERWATCH MOVEMENT TECHNIQUE

2-15. The lead element moves continuously. Trailing elements move at varying speeds, sometimes pausing to overwatch movement of the lead element. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Combat formation reflects the existing factors of METT-TC.
02	Yes/No	Unit complies with all graphic control measures.
03	Yes/No	Unit employs the movement formation the leader orders.
04	Yes/No	Unit commander determines that enemy contact is possible, but speed is important.
05	Yes/No	All subordinate elements assigned areas of responsibility for observation during the movement.
06	Yes/No	Unit leaders ensure that all-round coverage exists for observation and fire, to include air guard.
07	Yes/No	Route of movement offers concealment from enemy ground and air observation, avoids skylining, avoids moving directly forward from firing positions, crosses open areas quickly, avoids possible kill zones, avoids wide open spaces (especially where high ground dominates or where the terrain covers and conceals the enemy), and avoids obvious avenues of approach.
08	Time	To plan and prepare operation order.
09	Time	To initiate movement.
10	Time	To complete movement.
11	Percent	Of allocated forces in place at the start of the plan.
12	Percent	Of unit in designated combat formation throughout the movement.
13	Percent	Of unit moving on the specified route or axis.
14	Percent	Of casualties to the force occurring during the operation.
15	kph	Rate of movement.

ART 2.2.1.3 EMPLOY BOUNDING OVERWATCH MOVEMENT TECHNIQUE

2-16. Using successive or alternate bounds, overwatching elements cover bounding elements from covered, concealed positions with good observation of, and fields of fire against, possible enemy positions. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Combat formation reflects the existing factors of METT-TC.
02	Yes/No	Unit complies with all graphic control measures.
03	Yes/No	Unit employs the movement formation ordered by the leader.
04	Yes/No	Unit commander expects to make enemy contact.
05	Yes/No	All subordinate elements of the unit assigned areas of responsibility for observation during the movement.

No.	Scale	Measure
06	Yes/No	Unit leaders ensure all-round coverage exists for observation and fire, to include air guard.
07	Yes/No	Length of bounds, overwatch positions selected, and variation of techniques—use of alternate or successive bounds, reflects existing factors of METT-TC.
08	Yes/No	Route of movement offers concealment from enemy ground and air observation, avoids skylining, avoids moving directly forward from firing positions, crosses open areas quickly, avoids possible kill zones, avoids wide open spaces (especially where high ground dominates or where the terrain covers and conceals the enemy), and avoids obvious avenues of approach.
09	Time	To initiate movement.
10	Time	To complete movement.
11	Percent	Of allocated forces in place at the start of the execution of the plan.
12	Percent	Of unit in designated combat formation throughout the movement.
13	Percent	Of unit moving on the specified route or axis.
14	Percent	Of casualties to the force occurring during the operation.
15	kph	Rate of movement.

ART 2.2.2 CONDUCT ACTIONS ON CONTACT

2-17. Develop the situation once contact is made, concentrate the effects of combat power, and transition to a hasty attack or defense. Whether attacking or defending, commanders generate and sustain overwhelming combat power at the point combat forces collide to rapidly defeat the enemy. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit generates and sustains overwhelming combat power at the point of contact if the element that makes contact is able to defeat the enemy unassisted.
02	Yes/No	The generation of overwhelming combat power is the product of the recommended course of action to the higher commander.
03	Yes/No	ISR assets used to develop situation without main body being in contact with the enemy.
04	Time	To deploy and report.
05	Time	To evaluate and develop the situation.
06	Time	To choose course of action (COA).
07	Time	To execute selected COA.
08	Time	To recommend a COA to the higher commander.
09	Time	To return to previous mission.
10	Percent	Of friendly forces available to continue previous mission.
11	Percent	Combat effectiveness of enemy force that made contact.

ART 2.2.3 EMPLOY COMBAT PATROLS

2-18. Use ground and air detachments to provide security and harass, destroy, or capture enemy troops, equipment, or installations. (FM 7-10) (USAIS)

No.	Scale	Measure
01	Yes/No	Combat patrols provide security and harass, destroy, or capture enemy troops, equipment, or installations in accordance with the commander's intent.
02	Time	To prepare patrol plan.
03	Time	To conduct rehearsals.
04	Time	To conduct the combat patrol within time higher headquarters allocates.
05	Percent	Of assigned area covered during the patrol.
06	Percent	Of friendly casualties received during the combat patrol.
07	Percent	Of encountered enemy troops and equipment destroyed or captured.
08	Percent	Of information requirements achieved.

ART 2.2.4 CONDUCT COUNTERAMBUSH ACTIONS

2-19. Execute immediate action against near and far ambushes to minimize casualties, exit the enemy engagement area, inflict casualties on the enemy ambush force, and continue the mission. (FM 7-10) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission after exiting the enemy engagement area.
02	Yes/No	Unit security element detects the ambush.
03	Yes/No	Unit prevents the enemy from gaining intelligence.
04	Yes/No	Unit security element prevents the enemy from engaging the unit main body.
05	Yes/No	Unit bypasses the ambush kill zone and the enemy's associated security positions.
06	Yes/No	Unit attacks and defeats the enemy ambush force before the enemy initiates the ambush.
07	Yes/No	Unit disengages its elements in the kill zone before destroying all elements in the kill zone.
08	Yes/No	Unit engages and fixes the enemy to prevent his withdrawal.
09	Percent	Of enemy casualties.

ART 2.2.5 EXPLOIT TERRAIN TO EXPEDITE TACTICAL MOVEMENTS

2-20. Use terrain as a combat equalizer or multiplier by positioning or maneuvering forces to outfight the enemy. Reinforce natural terrain advantages through mining, barriers, and other obstacles. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit uses terrain to provide concealment from enemy ground and air observation.
02	Yes/No	Unit avoids skylining vehicles, soldiers, fighting positions, and survivability positions.
03	Yes/No	Unit avoids moving directly forward from firing positions toward the enemy.
04	Yes/No	Unit crosses open areas quickly.
05	Yes/No	Unit avoids possible enemy kill zones.
06	Yes/No	Unit avoids wide open spaces where the enemy can detect and engage it at long ranges, especially where high ground dominates or where the terrain covers and conceals the enemy.
07	Yes/No	Unit avoids obvious avenues of approach into enemy positions.

ART 2.2.6 CROSS A DANGER AREA

2-21. Move forces rapidly across potential enemy engagement areas without detection by the enemy and without exposing the entire force. (FM 7-85) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit prevents decisive engagement by the enemy.
02	Yes/No	Unit prevents the enemy from surprising the main body.
03	Time	To submit reports of the danger area to higher headquarters in accordance with unit standing operating procedures (SOP).
04	Time	For unit to cross danger area.
05	Percent	Of unit personnel and equipment that become casualties while crossing the area.
06	Percent	Of unit personnel and equipment that crosses the danger area.

ART 2.2.7 LINKUP WITH OTHER TACTICAL FORCES

2-22. A linkup is a meeting of friendly ground forces, which occurs in a variety of circumstances. It happens when an advancing force reaches an objective area previously seized by an airborne or air assault force; when an encircled element breaks out to rejoin friendly forces or a force comes to the relief of an encircled force; and when converging maneuver forces meet. Forces may be moving toward each other, or one may be stationary. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Units make physical contact with each other while accomplishing their assigned missions.
02	Yes/No	Main bodies of units linking up are not surprised by the enemy.
03	Yes/No	Higher headquarters directing linkup establishes control measures that protect both forces from fratricide and expedite execution of the linkup.
04	Time	To complete linkup plan.

No.	Scale	Measure
05	Time	Between planned and actual linkup time.
06	Time	For units linking up to establish a consolidated chain of command.
07	Number	Distance in kilometers/meters between planned and actual linkup location.
08	Number	Of instances of fratricide occurring during the linkup.

ART 2.2.8 CONDUCT PASSAGE OF LINES

2-23. A passage of lines is a tactical enabling operation in which one unit moves through another unit's positions with the intent of moving into or out of enemy contact. (FM 3-0) (USACAC)

No.	Scale	Measure
01	Yes/No	The unit moving in or out of contact accomplishes its mission after passing through the stationary unit.
02	Yes/No	The enemy surprises neither the stationary nor the passing unit main body.
03	Yes/No	Higher headquarters directing the passage designates subsequent missions for both forces, when and under what conditions passage of command takes place, start and finish times for the passage, contact points between the units involved, common maneuver control measures and graphics.
04	Yes/No	Stationary unit provides guides and other assistance to the passing unit in accordance with the order directing the passage.
05	Time	To pass through the lines.
06	Time	Difference between planning contact and making contact.
07	Time	That the unit moves all personnel and equipment through the stationary unit is not later than the time the order specifies.
08	Time	Between planning the transfer of responsibility for the AO and when it actually occurs.
09	Percent	Of support (fires, maintenance, medical, etc.) the passing unit requests and the stationary unit provides.
10	Distance	Between planned and actual location of contact points.
11	Distance	Between planned and actual locations where the passage of lines takes place.
12	Number	Of casualties from friendly fire or obstacles in either the stationary or the passing unit.

ART 2.2.8.1 CONDUCT A FORWARD PASSAGE OF LINES

2-24. A forward passage of lines occurs when a unit passes through another unit's position while moving toward the enemy. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The unit conducting the forward passage of lines accomplishes its mission after passing through the stationary unit.
02	Yes/No	The enemy surprises neither the stationary nor the passing unit main body.

No.	Scale	Measure
03	Yes/No	Higher headquarters directing the passage designates subsequent missions for both forces, when and under what conditions passage of command takes place, start and finish times for the passage, contact points between the units involved, common maneuver control measures and graphics.
04	Yes/No	Stationary unit provides guides and other assistance to the passing unit in accordance with the order directing the passage.
05	Time	To complete the forward passage of lines.
06	Time	Difference between planning the contact and making contact.
07	Time	That the unit moves all personnel and equipment through the stationary unit is not later than the time the order specifies.
08	Time	Between planning the transfer of responsibility and when it actually occurs.
09	Percent	Of support (fires, maintenance, medical, etc.) the passing unit requests and the stationary unit provides.
10	Distance	Between planned and actual location of contact point.
11	Distance	Between planned and actual location(s) where the passage of lines takes place.
12	Number	Of casualties from friendly fire or obstacles in either the stationary or the passing unit.

ART 2.2.8.2 CONDUCT A REARWARD PASSAGE OF LINES

2-25. A rearward passage of lines occurs when a unit passes through another unit's positions while moving away from the enemy. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The unit conducting the rearward passage of lines accomplishes its mission after passing through the stationary unit.
02	Yes/No	The enemy surprises neither the stationary nor the passing unit main body.
03	Yes/No	Higher headquarters directing the passage designates subsequent missions for both forces, when and under what conditions passage of command takes place, start and finish times for the passage, contact points between the units involved, common maneuver control measures and graphics.
04	Yes/No	Stationary unit provides guides and other assistance to the passing unit in accordance with the order directing the passage.
05	Time	To complete the forward passage of lines.
06	Time	Difference between planning contact and making contact.
07	Time	That the unit moves all personnel and equipment through the stationary unit is not later than the time the order specifies.
08	Time	Between planning the transfer of responsibility for the AO and when it actually occurs.
09	Percent	Of support (fires, maintenance, medical, etc.) the passing unit requests and the stationary unit provides.

No.	Scale	Measure
10	Distance	Between planned and actual location of contact point.
11	Distance	Between planned and actual location(s) where the passage of lines takes place.
12	Number	Of casualties from friendly fire or obstacles in either the stationary or the passing unit.

ART 2.2.9 CONDUCT A RELIEF IN PLACE

2-26. A relief in place is a tactical enabling operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit. The responsibilities of the replaced elements for the mission and the assigned AOs transfer to the incoming unit. The incoming unit (relieving unit) usually assumes the same responsibilities and initially deploys in the same configuration as the outgoing unit. Relief in place is executed for a number of reasons including introducing a new unit into combat, changing a unit's mission, relieving a depleted unit in contact, retaining a unit, relieving the stress of prolonged operations in adverse conditions, resting a unit after long periods in a mission-oriented protection posture, decontaminating a unit, and avoiding excessive radiation exposure. Relief-in-place operations may be hasty or deliberate. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The relieving unit assumes command of the AO after the previously designate trigger event occurs.
02	Yes/No	Relieved unit starts its next mission in accordance with operations order.
03	Yes/No	Higher headquarters directing the relief designates subsequent missions for both forces, when and under what conditions passage of command takes place, start and finish times for the relief, contact points between the units involved, and common maneuver control measures and graphics.
04	Yes/No	Enemy does not detect the relief.
05	Yes/No	Enemy attacks during the relief are defeated.
06	Time	To complete the plan for conducting the relief in place.
07	Time	Of starting the relief is not later than the time the order specifies.
08	Time	Of completing the relief is not later than the time the order specifies.
09	Percent	Of designated supplies and equipment left in position.
10	Percent	Of relieved unit's fire, weapons plans, and range cards passing to relieving unit.
11	Percent	Of lanes marked and guides in place prior to initiating the relief.
12	Percent	Of friendly casualties resulting from an enemy attack during the relief.
13	Number	Of casualties from friendly fire or obstacles in either the relieving or the relieved unit.

ART 2.2.10 NAVIGATE FROM ONE POINT TO ANOTHER

2-27. Plan, record, and control the course of an individual, unit, vehicle, ship, or aircraft on the ground, in the air, or on the sea from one point to another.

ART 2.2.10 includes using navigational aids such as, maps, compasses, charts, stars, dead reckoning, and global positioning system receivers. It includes determining distance; direction; location; elevation/altitude; route; and data for navigational aids, orientation, and rate of movement. (FM 3-25.26) (USAIS)

No.	*Scale*	*Measure*
01	Yes/No	The unit is in the correct position at the correct time.
02	Time	To plan the movement of the individual, unit, vehicle, ship, or aircraft.
03	Time	Force delays due to navigational error.
04	Percent	Of force no longer mission capable due to navigational error accidents.
05	Percent	Of force that arrives at the correct destination at the planned time.

ART 2.2.11 CONDUCT A SURVIVABILITY MOVE

2-28. Rapidly displace a unit, command post, or facility in response to enemy direct and indirect fires, the approach of an enemy unit, or as a proactive measure based on IPB and risk analysis. (FM 3-90) (USACAC)

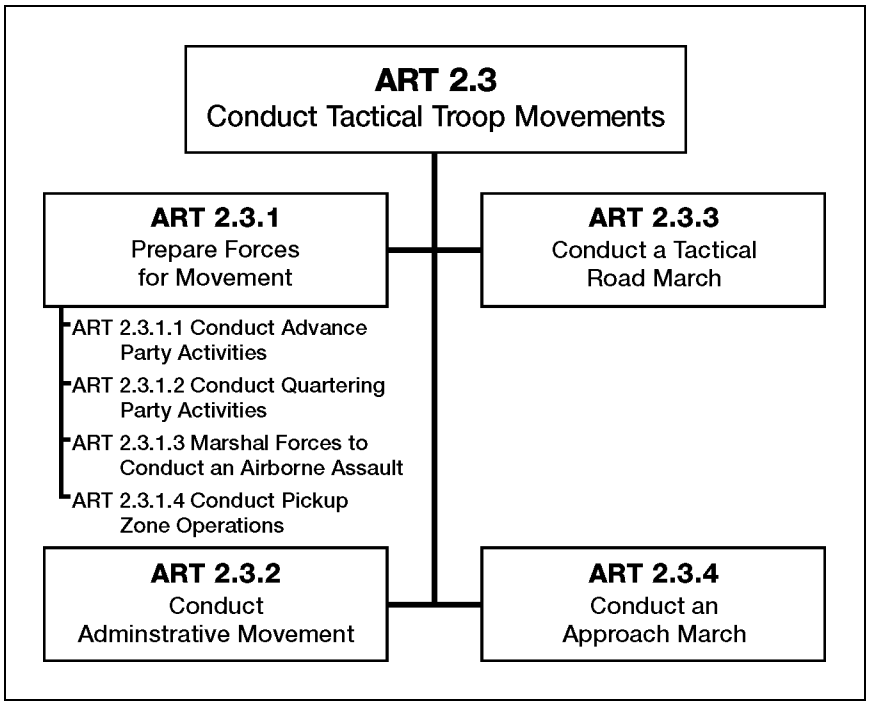
No.	*Scale*	*Measure*
01	Yes/No	Unit prevents the enemy from engaging the main body.
02	Yes/No	Unit prevents decisive engagement by the enemy.
03	Time	To report survivability move to higher HQs in accordance with unit SOPs.
04	Time	For unit to displace from area projected to be crossed by approaching enemy unit.
05	Time	For unit to become operational again after survivability move.
06	Percent	Of unit casualties—personnel and equipment—while displacing from the area projected to be traversed by the approaching enemy unit.
07	Percent	Of unit personnel and equipment that displaces before the enemy unit arrives.

ART 2.2.12 NEGOTIATE A TACTICAL AREA OF OPERATIONS

2-29. Overcome the challenges presented by the trafficability or configuration of the ground, air, or sea environment through the inherent characteristics of personnel or their equipment. This task involves overcoming aspects of the physical environment such as, high winds; rain; and the presence of NBC agents. It includes crossing or bypassing contaminated areas. (FM 3-100) (USACMLS)

Note: ART 2.2.12 is distinguished from ART 2.3.3 (Conduct Tactical Road March) and ART 2.3.4 (Conduct an Approach March) by the environment in which it takes place. ARTs 2.3.3 and 2.3.4 involve only the act of moving units. ART 2.2.12 includes crossing and bypassing contaminated areas.

No.	Scale	Measure
01	Yes/No	The unit is in the correct position at the correct time.
02	Time	Force delays due to poor trafficability or environmental conditions.
03	Time	Force delays to assume appropriate mission oriented protective posture (MOPP).
04	kph	Rate of movement.
05	Percent	Decrease in rate of movement resulting from actual terrain trafficability being different than that in the plan.
06	Percent	Of force no longer fully mission capable resulting from terrain accidents.
07	Percent	Of force delayed due to terrain conditions.



SECTION III – ART 2.3: CONDUCT TACTICAL TROOP MOVEMENTS

2-30. Relocate or move by any means or mode of transportation preparatory to deploying into combat formations to support tactical commander and joint force commander plans. Positioning/repositioning must support the commander's intent/concept of operation. ART 2.3 includes generating and dispersing tactical forces. It also includes moving units by military, host-nation, or contracted trucks or buses. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit follows the prescribed route at the prescribed speed without deviating unless required otherwise by enemy action or on orders from higher headquarters.
02	Yes/No	Unit crosses and clears start point (SP) and release point (RP) at designated time.
03	Yes/No	Enemy does not surprise the unit's main body because of a failure to conduct security operations.
04	Percent	Of casualties sustained during the movement.
05	kph	Rate of movement.

ART 2.3.1 PREPARE FORCES FOR MOVEMENT

2-31. Assemble, inspect, and load personnel, equipment, and supplies to prepare for a tactical movement. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit prepared to move at the appointed time and place.
02	Time	To load forces and equipment.
03	Time	To prepare movement orders.
04	Time	To deploy transportation and security forces.
05	Percent	Of forces and equipment loaded within established time requirements.

ART 2.3.1.1 CONDUCT ADVANCE PARTY ACTIVITIES

2-32. Send a detachment ahead of the main body to establish conditions for the main body arrival. Conditions include administrative and logistic actions. (FM 100-17) (CASCOM-DPMO)

No.	Scale	Measure
01	Yes/No	The advance party establishes necessary conditions for the unit main body to conduct and complete the reception, staging, onward movement and integration (RSO&I) within the established time.
02	Yes/No	Advance party arranges to receive the main body.
03	Yes/No	Advance party assists POD with discharge operations.
04	Yes/No	Advance party consists of battery teams, fuel handlers, drivers, and property book and supply personnel.
05	Yes/No	Advance party deploys sufficiently in advance of the main body to accomplish its assigned responsibilities.

ART 2.3.1.2 CONDUCT QUARTERING PARTY ACTIVITIES

2-33. Secure, reconnoiter, and organize an area for the main body's arrival and occupation. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Quartering party deploys sufficiently in advance of the main body to accomplish its assigned responsibilities.
02	Yes/No	Quartering party guides unit main body into position from the release point to precise locations within the assembly area.
03	Yes/No	Quartering party secures the designated assembly area.
04	Yes/No	Quartering party conducts an area reconnaissance of the designated assembly area.
05	Distance	Assembly area and positions within it change from tentative locations selected by unit commander based on a map reconnaissance.

ART 2.3.1.3 MARSHAL FORCES TO CONDUCT AN AIRBORNE ASSAULT

2-34. Marshalling airborne forces involves conducting the planning, rehearsals, and briefbacks addressed in ART 7.0 (Command and Control Battlefield Operating System). It involves assembling and preparing paratroopers, equipment, and supplies for the jump. It includes conducting airborne-specific briefings; prejump training; the actual moving of paratroopers, equipment, and supplies to departure airfields; and loading into the aircraft. (FM 90-26) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit completes all preparations—such as assembling, organizing, marking, and rigging unit equipment, rations, ammunition, water, and other supplies—not later than the time the operations order specifies. Preparations also include, but are not limited to, ensuring the cross loading of personnel and key weapon systems, conducting prejump refresher training and mission rehearsals, and moving to the departure airfield not later than the time the operations order specifies.
02	Yes/No	Unit commander issues warning order and operation order.
03	Yes/No	The unit meets station time.
04	Yes/No	The unit meets load time.
05	Time	From receiving warning order to completing preparations for airborne operation.

ART 2.3.1.4 CONDUCT PICKUP ZONE OPERATIONS

2-35. Pickup zone operations involve assembling and preparing soldiers, equipment, and supplies for an air assault. ART 2.3.1.4 includes conducting air assault-specific briefings and training; moving soldiers, equipment, and supplies to pickup zones; and loading into rotary or variable-wing aircraft. (FM 90-4) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit completes all preparations—such as assembling, organizing, marking, and rigging unit equipment, rations, ammunition, water, and other supplies—not later than the time the operations order specifies. Preparations also include, but are not limited to, ensuring the cross-loading of personnel and key weapon systems, conducting air assault refresher training and mission rehearsals, conducting an air mission brief, and moving to the departure airfield not later than the time the operations order specifies.
02	Yes/No	Unit commander issues warning order and operation order.
03	Yes/No	Unit adjusts load plan and ground tactical plan to account for less than scheduled amount of aircraft.
04	Yes/No	Unit meets load time.
05	Yes/No	Unit maintains local security during loading.
06	Yes/No	Releases available attack/reconnaissance assets from pickup zone security to perform air route reconnaissance and to establish mobile flank screens for air movement to landing zones.
07	Time	From receiving warning order to completing preparations for air assault operation.
08	Percent	Of changes in numbers and types of rotary-wing aircraft.

ART 2.3.2 CONDUCT ADMINISTRATIVE MOVEMENT

2-36. Execute a movement in which troops and vehicles are arranged to expedite their movement and conserve time and resources when no enemy interference, except by air, is anticipated. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Complete unit movement not later than time the operation order specifies and use transportation resources/assets efficiently.
02	Time	To initiate movement.
03	Time	To complete movement.
04	Percent	Of force completing the movement.
05	kph	Rate of movement.

ART 2.3.3 CONDUCT TACTICAL ROAD MARCH

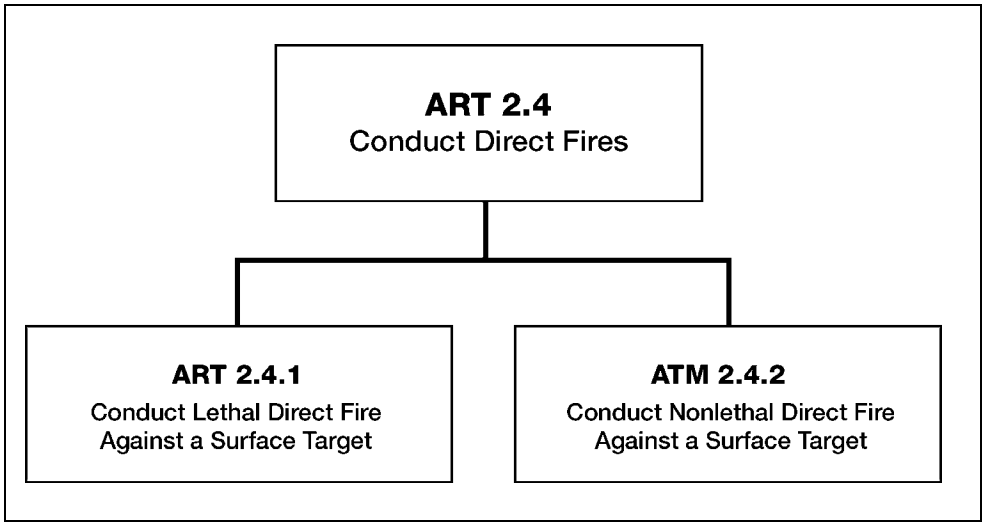
2-37. A tactical road march is a rapid movement to relocate units within an area of operations (AO) in order to prepare for combat operations. Commanders arrange troops and vehicles to expedite their movement and conserve time, energy, and unit integrity. They anticipate no interference except by enemy air, special operations forces, or sympathizers. Units conducting tactical road marches employ three tactical march techniques: open column, close column, and infiltration. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit crosses and clears SP and RP at designated times.
02	Yes/No	Unit follows the prescribed route without deviation unless required otherwise by enemy action or on orders from higher headquarters.
03	Yes/No	Enemy does not surprise the unit main body through a failure to conduct appropriate security operations.
04	Yes/No	Unit employs appropriate tactical march technique (open column, close column, or infiltration).
05	Yes/No	Unit task organizes properly for tactical road march.
06	Time	To initiate movement.
07	Time	To complete movement.
08	Percent	Of force completing the movement.
09	Percent	Of unit casualties.

ART 2.3.4 CONDUCT AN APPROACH MARCH

2-38. Conduct an advance of a combat unit when direct contact with the enemy is intended. An approach march emphasizes speed over tactical deployment. It is used when the enemy's approximate location is known and allows the attacking force to move with greater speed and less physical security or dispersion. An approach march ends in an attack position, assembly area, or assault position; or it transitions to an attack. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Using the approach march allows the force to move quickly to the area where it expects to make contact with the enemy and transition to an appropriate combat formation.
02	Yes/No	Unit task organizes properly for approach march.
03	Yes/No	Unit uses established control measures and control graphics.
04	Time	To initiate the approach march.
05	Time	To complete the approach march.
06	Time	Between planned and actual unit arrival at checkpoints.
07	kph	Rate of movement.
08	Percent	Of force completing the approach march.
09	Percent	Of force maintaining correct interval between units.
10	Percent	Of force using correct movement techniques (traveling, traveling overwatch, bounding overwatch).



SECTION IV – ART 2.4: CONDUCT DIRECT FIRES

2-39. Take the enemy under fire with lethal and nonlethal direct fires delivered on a target, using the target as the point of aim for either the gun or the gunner. Examples of direct-fire systems include small arms, tanks, antitank weapons, automatic weapons, and directed energy and acoustic weapons. ART 2.4 includes attack helicopter fires and direct fire tied directly to battlefield movement. (FM 3-90) (USACAC)

Note: ART 4.0 (Air Defense Battlefield Operating System) includes the attack of aerial targets.

ART 7.4 (Plan Tactical Operations Using the MDMP/TLP) addresses the elements of direct fire planning, such as the integration of indirect fires, obstacles and terrain, and air and ground assets with control measures designed to mass fires.

No.	*Scale*	*Measure*
01	Yes/No	Effects of unit direct fires contribute to accomplishing unit mission.
02	Yes/No	Was the conduct of direct fires done in accordance with established rules of engagement?
03	Yes/No	Used correct weapon to engage target.
04	Time	To get complete attack on direct fire target after detecting and identifying target.
05	Time	To suppress targets.
06	Percent	Of probability of suppressing a target.
07	Percent	Of probability of a hit.
08	Percent	Of probability of a kill given a hit.
09	Percent	Of missions flown/fired to achieve desired target damage.
10	Percent	Of available direct fire weapon systems engaging direct fire targets.

No.	Scale	Measure
11	Percent	Of direct fire targets not engaged.
12	Percent	Of enemy performance degraded due to direct fire attack.

ART 2.4.1 CONDUCT LETHAL DIRECT FIRE AGAINST A SURFACE TARGET

2-40. Engage enemy equipment and materiel, personnel, fortifications, and facilities with direct fire designed to destroy the target. These direct fires may be from ground or rotary-wing systems. ART 2.4.1 includes employing fires from special operations rotary-wing platforms to support special operations force elements. (FM 3-90) (USACAC)

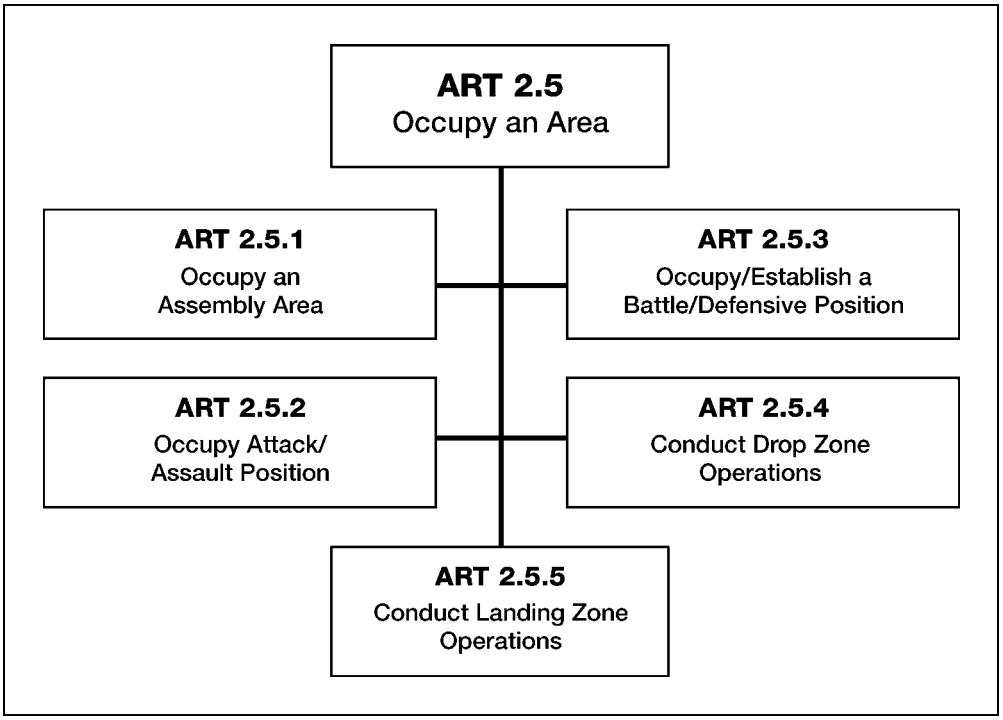
No.	Scale	Measure
01	Yes/No	Effects of unit lethal direct fires contribute to accomplishing unit mission.
02	Yes/No	Was direct fire attack conducted in accordance with established rules of engagement?
03	Yes/No	Used correct weapon to engage target.
04	Time	To get complete attack on direct fire target after detecting and identifying target.
05	Time	To suppress targets.
06	Percent	Of probability of suppressing a target.
07	Percent	Of probability of a hit.
08	Percent	Of probability of a kill given a hit.
09	Percent	Of missions flown/fired to achieve desired target damage.
10	Percent	Of available direct fire weapon systems engaging direct fire targets.
11	Percent	Of direct fire targets not engaged.
12	Percent	Of enemy performance degraded due to lethal direct fire attack.

ART 2.4.2 CONDUCT NONLETHAL DIRECT FIRE AGAINST A SURFACE TARGET

2-41. Employ direct fire or other close combat means designed to impair the performance of enemy/hostile personnel and equipment without destroying them. ART 2.4.2 includes using such weapons and munitions as directed energy and radio frequency weapons, rubber bullets, riot control agents, and water cannons. (FM 34-40) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Effects of unit direct fires contribute to accomplishing the unit mission.
02	Yes/No	Was the conduct of nonlethal direct fires against surface target done in accordance with rules of engagement, to include receipt of the approval of weapons released from a competent authority?
03	Time	To develop nonlethal direct fire options after receiving warning order.
04	Time	To complete nonlethal direct fire attack on target (after initiation).
05	Percent	Of all targets evaluated as candidates for nonlethal direct fire attack.

No.	Scale	Measure
06	Percent	Of nonlethal direct fire attacks on selected targets that achieve desired damage criteria.
07	Percent	Of nonlethal direct fire attacks without lethal results.
08	Percent	Of nonlethal direct fire attacks that require lethal fire support to achieve desired damage criteria.
09	Percent	Of nonlethal direct fire attacks that result in death or injury to friendly employing forces and systems.
10	Percent	Of enemy performance degraded due to nonlethal direct fire attack.



SECTION V – ART 2.5: OCCUPY AN AREA

2-42. Move forces into and secure an area from which to conduct future operations. This task includes occupying assembly areas; occupying attack or assault positions; and establishing and occupying defensive positions, including the five types of battle positions: primary, alternate, supplementary, subsequent and strong point. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit controls the area so the enemy cannot use the area.
02	Time	Unit moves all personnel and essential equipment into its assigned positions not later than the time the order specifies.

ART 2.5.1 OCCUPY AN ASSEMBLY AREA

2-43. Move forces into and occupy an assembly area in which to assemble and prepare for further action. Actions include resupplying and organizing forces for future operations. (FM 3-90) (USACAC)

No.	*Scale*	*Measure*
01	Yes/No	Unit moves into and occupies an assembly area in which it assembles and prepares for further action within the time the operation order specifies.
02	Yes/No	Unit forces enemy reconnaissance elements to withdraw without allowing penetration of the assembly area perimeter.
03	Yes/No	The enemy does not surprise the unit main body through a failure to conduct security operations.
04	Yes/No	Unit disperses its forces appropriately, uses cover and concealment, designates entrances, exits, and internal routes in accordance with the factors of METT-TC to include drainage and soil conditions.
05	Time	Unit moves all personnel and essential equipment into assigned initial defensive positions not later than the time the order specifies.
06	Time	Unit completes preparations for next operation in accordance with commander's intent not later than the time the operation order specifies.

ART 2.5.2 OCCUPY AN ATTACK/ASSAULT POSITION

2-44. As part of an offensive operation, move tactical forces into and through these positions to prepare for further action or support the actions of another force. Activities include making last-minute coordination and tactical adjustments, preparing specialized equipment for immediate use, and protecting the occupying force until supporting fire is lifted or shifted. This task includes the use of attack-by-fire and support-by-fire positions and holding areas by attack helicopters. (FM 3-90) (USACAC)

No.	*Scale*	*Measure*
01	Yes/No	Unit occupies attack/assault positions only as necessary to ensure the attack's success.
02	Yes/No	Unit clears these positions of enemy forces.
03	Yes/No	The enemy does not surprise the unit main body.
04	Time	Unit moves all personnel and essential equipment into assigned positions not later than the time the order specifies.
05	Time	Unit completes attack/assault preparations in accordance with commander's intent and the factors of METT-TC.

ART 2.5.3 OCCUPY/ESTABLISH A BATTLE/DEFENSIVE POSITION

2-45. As part of a defensive operation, move tactical forces into positions to prepare for further action. A battle position is a defensive location oriented on a likely enemy avenue of approach. There are five kinds of battle positions: primary, alternate, supplementary, subsequent, and strongpoint. The positions may be located on any type of land and terrain, such as urban, natural, mountainous, piedmont, steppe, delta, desert, jungle, and arctic.

(See UJTL condition C 1.0 for factors that describe the physical environment.) (FM 3-90) (USACAC)

Note: ART 7.4 (Plan Tactical Operations Using the MDMP/TLP) addresses defensive planning.

No.	*Scale*	*Measure*
01	Yes/No	Unit can conduct a coherent defense from its positions.
02	Yes/No	Clear enemy forces from the defended area.
03	Yes/No	The enemy does not surprise the unit main body.
04	Time	Unit moves all personnel and essential equipment into assigned positions not later than the time the order specifies.
05	Time	The unit prepares to defend at the time the order prescribes.
06	Percent	Of acceptable friendly losses.
07	Number	Of casualties from friendly fire.

ART 2.5.4 CONDUCT DROP ZONE OPERATIONS

2-46. ART 2.5.4 begins when paratroopers and equipment exit the aircraft by parachute or airland. It includes the actions of pathfinders. ART 2.5.4 ends when all elements of the relevant airborne echelon arrive in the objective area. (FM 90-26) (USAIS)

No.	*Scale*	*Measure*
01	Yes/No	Unit assembles according to its landing plan (on the objective, on the drop zone, or in an assembly area adjacent to the drop zone) and begins to execute the ground tactical plan not later than the time the operation order specifies.
02	Yes/No	Enemy forces are unable to engage forces landing on the drop zone.
03	Yes/No	Security positions are positioned around drop zone until completion of the vertical envelopment process.
04	Yes/No	Drop zone cleared of equipment and debris for use by follow-on forces or future airland operations.
05	Time	To conduct map or physical reconnaissance of site to ensure that drop zone supports operational requirements, such as degree of slope and surface conditions, appropriate size, and free of obstacles.
06	Time	To clear or mark obstacles, such as stumps, fences, and barbed wire located on the drop zone.
07	Time	To ensure drop zone approach and exit paths are free of obstructions.
08	Time	To mark the drop zone.
09	Time	For pathfinder elements to establish communications with follow-on aircraft.
10	Time	For pathfinder elements to confirm or determine drop heading with aircrew.
11	Percent	Of dropped and airlanded aircraft loads under control of a ground station located on or near the drop zone.

No.	Scale	Measure
12	Percent	Of airborne unit personnel and cargo drops landing within the limits of the drop zone.
13	Number	Of personnel landing within the limits of the drop zone.
14	Number	Of tons and types of cargo landing within the limits of the drop zone or that can be recovered by the airborne unit.
15	Number	Of casualties from accidents caused by conditions on the drop zone, such as wind speed, obstacles, and surface conditions.

ART 2.5.5 CONDUCT LANDING ZONE OPERATIONS

2-47. ART 2.5.5 begins when soldiers and equipment exit the helicopters. It does not include air traffic control or efforts to improve the landing zone. ART 2.5.5 ends when all elements of the relevant air assault echelon arrive in the objective area. (FM 90-4) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit assembles according to its landing plan (on the objective, on the landing zone, or in an assembly area adjacent the landing zone) and begins to execute the ground tactical plan not later than the time the operation order specifies.
02	Yes/No	Security positions around landing zone occupied until completion of the vertical envelopment process.
03	Yes/No	Landing zone cleared of equipment and debris for use by follow-on forces or future airland operations.
04	Time	To conduct map or physical reconnaissance of site to ensure that landing zone supports operational requirements, such as degree of slope and surface conditions, appropriate size to accommodate the helicopters delivering the force, and free of obstacles.
05	Time	To clear or mark obstacles, such as stumps and fences located on the landing zone.
06	Time	To ensure landing zone approach and exit paths are free of obstructions.
07	Time	To mark the landing zone.
08	Percent	Of air assault unit personnel and cargo landing within the limits of the landing zone.
09	Number	Of personnel landing on the landing zone.
10	Number	Of tons and types of cargo landing on the landing zone.
11	Number	Of casualties from accidents caused by landing zone conditions, such as foreign object damage (FOD), and hidden obstacles.

SECTION VI – ART 2.6: EMPLOY SERE TECHNIQUES

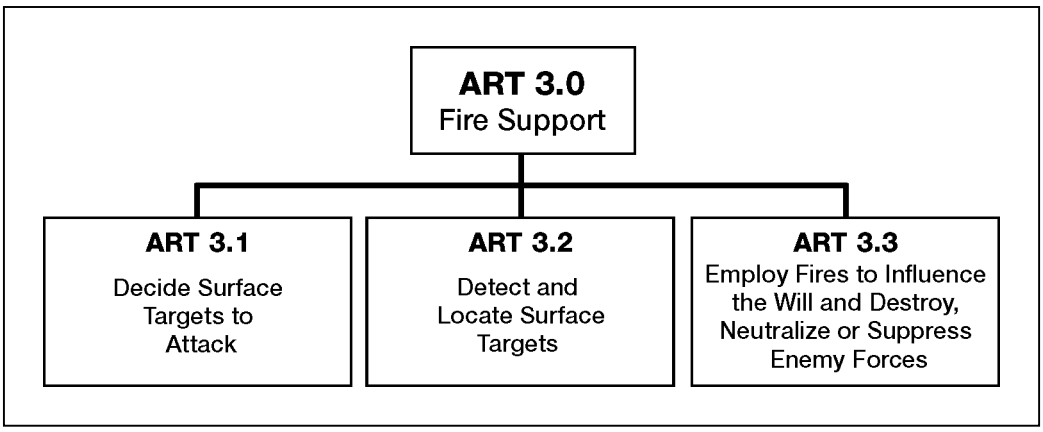
2-48. Employ techniques to support unit or collective efforts directed toward survival, evasion, resistance, and escape (SERE). This task includes the conduct of unit training that supports theater standards for SERE training for all personnel, inclusive of, but not limited to, high risk of capture personnel. (FM 100-25) (USAJFKSWC)

No.	*Scale*	*Measure*
01	Yes/No	Tactical safe areas or evasion and recovery areas designated and maintained by tactical units.
02	Time	To report isolated personnel (from time of isolating incident, such as encirclement, shoot-down of aircraft, etc.) to appropriate headquarters, Army Rescue Coordination Center, or theater Joint Search and Rescue Center.
03	Percent	Of high risk of capture (HRC) personnel trained to theater SERE or unit standards.
04	Percent	Of tactical evader caches, compromised within three months of emplacement.
05	Percent	Of evaders, beyond capability or availability of rescue platform, provide resupply by cache or air-delivered package.
06	Percent	Of escapees, recovered.
07	Number	Of HRC personnel trained to theater SERE or unit standards.
08	Number	Of evaders, beyond capability or availability of rescue platform, provide resupply by cache or air-delivered package.
09	Number	Of escapees, recovered.

Chapter 3

ART 3.0: The Fire Support Battlefield Operating System

The fire support battlefield operating system encompasses the collective and coordinated use of target-acquisition data, indirect-fire weapons, fixed-wing aircraft, offensive information operations, and other lethal and nonlethal means against targets located throughout an AO. The essential features of the fire support battlefield operating system are acquiring and processing tactical targets and employing fire support. ART 4.0 Air Defense Battlefield Operating System addresses acquiring and attacking aerial targets.



SECTION I – ART 3.1: DECIDE SURFACE TARGETS TO ATTACK

3-1. Analyze the situation relative to the mission, objectives, and capabilities. Identify and nominate specific vulnerabilities and/or high-payoff targets that if influenced, degraded, delayed, disrupted, disabled, or destroyed will accomplish the commander's intent. (FM 6-20) (USAFAS)

No.	*Scale*	*Measure*
01	Yes/No	Targets selected allow for accomplishing the unit mission and commander's intent.
02	Yes/No	Selected targets reviewed for compliance with rules of engagement.
03	Time	To select and decide on attacking a high priority target once inside the execution cycle.
04	Time	To create a target nomination list.

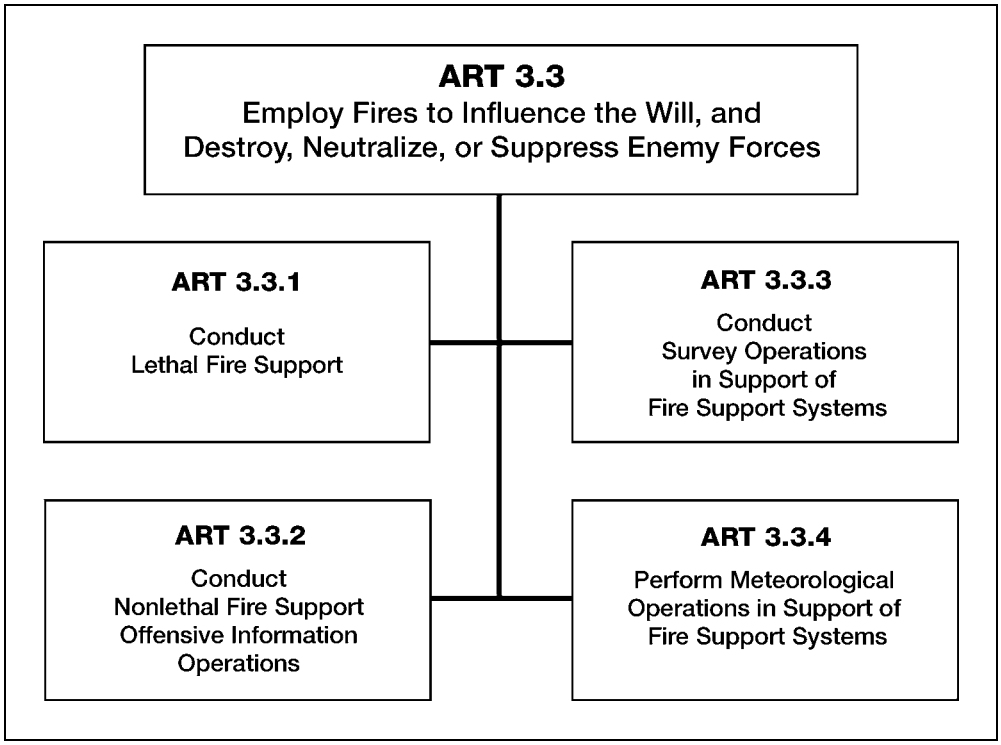
No.	Scale	Measure
05	Time	To complete target prioritization.
06	Time	To determine moving target intercept points.
07	Time	To issue prohibited target guidance.
08	Time	To pass commander's guidance to targeting agencies.
09	Percent	Of high-priority targets discovered resulting in a reprioritized target list.
10	Percent	Of potential targets subjected to systematic analysis.
11	Percent	Of potential targets analyzed within established time parameters.
12	Percent	Of selected targets that completed duplication checks.
13	Percent	Of selected high-priority targets accurately identified.

SECTION II – ART 3.2: DETECT AND LOCATE SURFACE TARGETS

3-2. Perceive an object of possible military interest without confirming it by recognition (detect). Determine the placement of a target on the battlefield (locate). Target location can be expressed, for example, as a six-digit grid coordinate. (FM 6-20) (USAFAS)

Note: The contributions made by the intelligence BOS toward this task can be found in the ART 1.4.1, Provide Intelligence Support to Targeting, task branch.

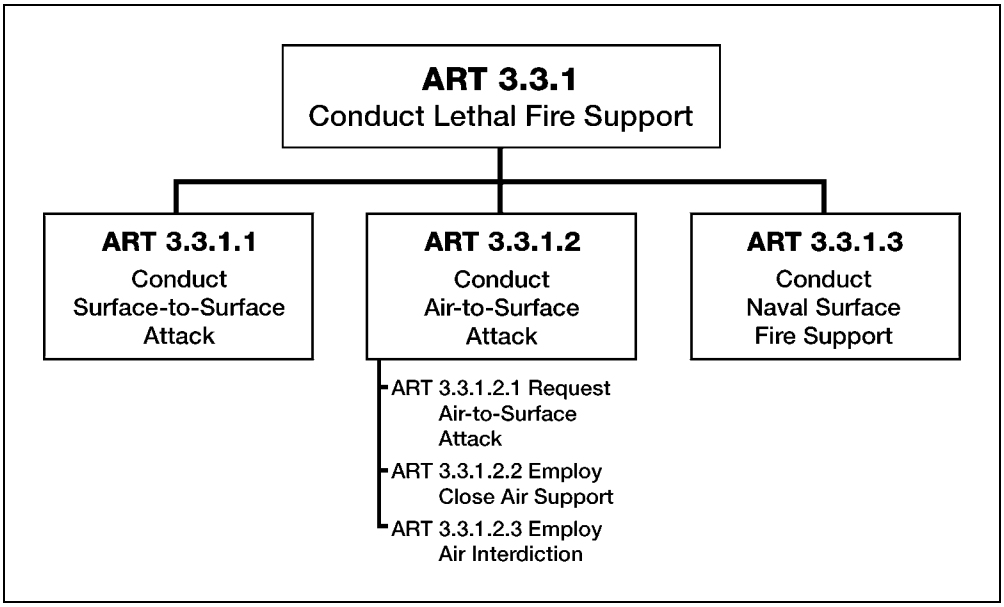
No.	Scale	Measure
01	Yes/No	Detect and locate all high-priority and high-payoff targets within the AO.
02	Time	To locate targets during reconnaissance and surveillance of defined target area of interest.
03	Percent	Of potential targets detected to targeting accuracy during reconnaissance and surveillance.
04	Percent	Of potential targets not detected during reconnaissance and surveillance.
05	Percent	Of target locations verified before next targeting cycle.
06	Percent	Of designated HPTs that have correct location data.
07	Number	Of potential targets not detected per given period during reconnaissance and surveillance.
08	Number	Of potential targets detected per given period during reconnaissance and surveillance.



SECTION III – ART 3.3. EMPLOY FIRES TO INFLUENCE THE WILL, AND DESTROY, NEUTRALIZE, OR SUPPRESS ENEMY FORCES

3-3. Conduct coordinated fires of fixed-wing aircraft, land- and sea-based indirect fire systems, and offensive information operations to support land tactical-level operations against surface targets. (FM 6-20) (USACAC)

No.	*Scale*	*Measure*
01	Yes/No	Fires achieve the commander's fire support guidance.
02	Time	For a given fire support weapon system to respond.
03	Time	To reattack target after battle damage assessment.
04	Percent	Of target attacks that achieve desired results.
05	Percent	Of enemy targets engaged.
06	Percent	Of friendly AO within the range of supporting fire support systems.
07	Percent	Of fire support missions synchronized with the maneuver of friendly units.
08	Number	Of instances where friendly fire support results in friendly casualties.
09	Number	Of COA denied to an enemy or friendly force due to friendly fire support efforts as determined from interrogations and after action reviews.
10	Number	Of instances of collateral damage beyond the scope of the rules of engagement (ROE).



ART 3.3.1 CONDUCT LETHAL FIRE SUPPORT

3-4. Use fire support weapons systems against troops, fortifications, materiel, or facilities. (FM 6-20) (USAFAS)

No.	*Scale*	*Measure*
01	Yes/No	Lethal fire support achieves desired result.
02	Yes/No	Was lethal fire support conducted in accordance with established rules of engagement?
03	Time	To get ordnance on target after initiating task.
04	Time	To complete attack after identifying target.
05	Time	To provide adjustment data after observing first rounds.
06	Time	To select targets for attack.
07	Time	To plan and coordinate naval surface fire support attack.
08	Time	To prepare to conduct a surface-to-surface attack.
09	Percent	Of total fire support missions requested by units executed.
10	Percent	Of the probability of a hit when selecting the correct munitions under existing conditions.
11	Percent	Of the probability of catastrophic, mobility, or firepower kill when selecting the correct munitions under existing conditions.
12	Percent	Of high-priority missions executed within specified time.
13	Percent	Of missions flown/fired achieve desired target damage.
14	Percent	Of preplanned targets successfully attacked during operations.
15	Percent	Of desired results achieved by expected conclusion of a phase of the operation.
16	Percent	Of time on target mission completed on time.
17	Percent	Of enemy HPT delivery systems engaged/destroyed by friendly forces.

No.	Scale	Measure
18	Percent	Of friendly fire support systems available to deliver ordnance.
19	Percent	Of enemy forces destroyed, delayed, disrupted, or degraded in accordance with FM 3-90 definitions.
20	Percent	Of total target list successfully engaged.
21	Percent	Of unplanned enemy targets successfully engaged.
22	Percent	Of unit basic load of ordnance available for use in lethal attack.
23	Percent	Of enemy high-priority targets requiring more than one type of weapon system to ensure successful attack.
24	Percent	Of lethal fire support effort diverted by higher commanders to support their targeting priorities.
25	Number	Of fire support systems available.

ART 3.3.1.1 CONDUCT SURFACE-TO-SURFACE ATTACK

3-5. Use ground-based, indirect-fire weapons systems to destroy, suppress, or neutralize enemy equipment (including aircraft on the ground), materiel, personnel, fortifications, and facilities. (FM 6-20) (USAFAS)

No.	Scale	Measure
01	Yes/No	Surface-to-surface attack achieves desired result.
02	Yes/No	Was surface-to-surface attack conducted in accordance with established rules of engagement?
03	Time	To get ordnance on target after initiating task.
04	Time	To complete attack after identifying target.
05	Time	To provide adjustment data after observing first rounds.
06	Time	To plan and coordinate surface-to-surface attack.
07	Time	To prepare for surface-to-surface attack.
08	Percent	Of total fire support missions requested by units executed.
09	Percent	Of the probability of a hit when selecting the correct munitions under sufficient conditions.
10	Percent	Of the probability of catastrophic, mobility, or firepower kill given a hit when selecting correct munitions under sufficient conditions.
11	Percent	Of high-priority missions executed within specified time.
12	Percent	Of missions fired that achieve desired target damage.
13	Percent	Of preplanned targets successfully attacked during operation.
14	Percent	Of time on target mission completed on time.
15	Percent	Of enemy HPT delivery systems engaged/destroyed by friendly forces.
16	Percent	Of friendly fire support systems available to deliver ordnance.
17	Percent	Of enemy forces destroyed, delayed, disrupted, or degraded according to FM 3-90 definitions.
18	Percent	Of total target list successfully engaged.
19	Percent	Of unplanned enemy targets successfully engaged.
20	Percent	Of unit basic load of ordnance available for use in lethal attack.

No.	Scale	Measure
21	Percent	Of selected targets for which accurate coordinates are available.
22	Number	Of fire support systems available.

ART 3.3.1.2 CONDUCT AIR-TO-SURFACE ATTACK

3-6. Use fixed-wing and rotary-wing aircraft-mounted weapon systems to destroy, suppress, or neutralize equipment (including aircraft on the ground), materiel, personnel, fortifications, and facilities. ART 3.3.1.2 includes the integration of fires from aerial platforms with other fire support systems. (FM 90-21) (USATRADOC DCS-DOC/ALSA)

No.	Scale	Measure
01	Yes/No	Air-to-surface attacks allow the commander to accomplish his mission within identified time and resource constraints.
02	Yes/No	Was air-to-surface attack conducted in accordance with established rules of engagement?
03	Time	To process air-to-surface attack requests through fire support (fixed-wing) or maneuver (rotary-wing) channels as appropriate.
04	Time	For aerial systems to respond to mission request.
05	Time	For aircraft to identify target.
06	Time	To get ordnance on target after initiating air-to-surface attack request.
07	Percent	Of requested missions executed.
08	Percent	Of availability of aerial weapon systems (fixed-wing and rotary-wing).
09	Percent	Of missions where the ordnance carried by aerial weapon systems is appropriate for the target attacked.
10	Percent	Of missions requested directed to appropriate agency.
11	Percent	Of targets engaged by friendly aerial weapon systems (fixed wing and rotary wing).
12	Percent	Of friendly force operations delayed, disrupted, or modified due to lack of requested air support according to FM 3-90 definitions.
13	Percent	Of targets attacked achieve desired results.
14	Percent	Of maneuver forces having aerial weapon systems available for employment.
15	Percent	Of air-to-surface attack missions conducted without incidents of fratricide.
16	Percent	Of aerial weapon systems having functioning identification friend or foe (IFF) systems.
17	Percent	Of air-to-surface missions cancelled because of weather restrictions.
18	Number	Of aerial weapon systems available to support the commander.

ART 3.3.1.2.1 Request Air-to-Surface Attack

3-7. Request employment of Army special operations forces; Navy, Marine, and Air Force aircraft; and other systems to deliver rocket, cannon, missile fires, and bombs on surface targets. (FM 90-21) (USATRADOC DCS-DOC/ALSA)

No.	Scale	Measure
01	Yes/No	Respond to requests for an air-to-surface attack in a timely manner to provide support at the appropriate time.
02	Time	To process air support request.
03	Time	To get ordnance on target after initiating air request.
04	Percent	Of missions requested by Army commanders executed.
05	Percent	Of availability of supporting air agencies for maneuver forces.
06	Percent	Of missions requested directed to appropriate agency.

ART 3.3.1.2.2 Employ Close Air Support

3-8. Employ aircraft in preplanned and immediate close air support missions and joint air attack team operations to destroy, delay, disrupt, or suppress targets to support land operations. Close air support requires positive IFF and positive or procedural control of aircraft. (FM 6-20) (USAFAS)

No.	Scale	Measure
01	Yes/No	Close air support destroys, delays, disrupts, or suppresses targets to support land operations.
02	Yes/No	Was the employment of close air support in accordance with established rules of engagement?
03	Time	To process close air support requests through fire support channels.
04	Time	For close air support aircraft to respond to mission request.
05	Time	For close air support aircraft to identify target.
06	Time	To get ordnance on target after initiating close air support request.
07	Percent	Of missions requested by Army commands executed.
08	Percent	Availability of supporting air agencies for maneuver forces.
09	Percent	Of missions requested directed to appropriate agency.
10	Percent	Of enemy units engaged with friendly air support.
11	Percent	Of friendly force operations delayed, disrupted, or modified due to lack of requested close air support.
12	Percent	Of targets attacked achieving desired results.
13	Percent	Of close air support missions conducted without incidents of fratricide.
14	Percent	Of close air support missions cancelled by weather.
15	Percent	Of close air support missions flown with IFF systems functioning and positive control of aircraft.

ART 3.3.1.2.3 Employ Air Interdiction

3-9. Employ aircraft to destroy, disable, disrupt, or delay enemy military potential before it can be used effectively against friendly ground forces far

enough from friendly forces that detailed integration of each air mission with friendly ground maneuver is not required. (FM 6-20) (USAFAS)

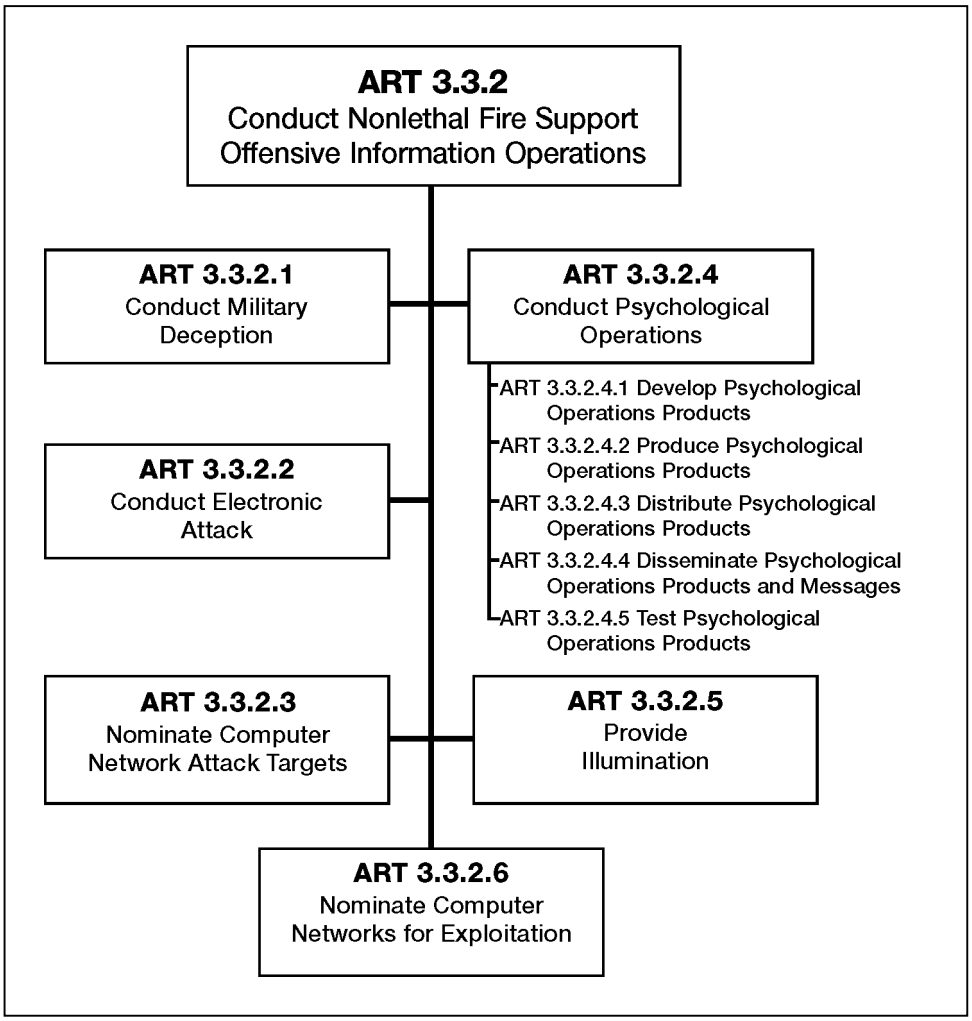
No.	Scale	Measure
01	Yes/No	Air interdiction destroys, delays, disrupts, or suppresses targets to support land operations.
02	Yes/No	Was the employment of air interdiction in accordance with established rules of engagement?
03	Time	To process air interdiction requests through fire support channels.
04	Time	For air interdiction aircraft to respond to mission request.
05	Time	For air interdiction aircraft to identify target.
06	Time	To get ordnance on target after initiating air interdiction request.
07	Percent	Of missions requested by Army commands executed.
08	Percent	Of mission requests directed to appropriate agency.
09	Percent	Of air interdiction enemy systems and targets engaged with friendly air support.
10	Percent	Of friendly force operations delayed, disrupted, or modified due to lack of requested air interdiction.
11	Percent	Of targets attacked achieving desired results.
12	Percent	Of air interdiction missions conducted without incidents of fratricide.
13	Percent	Of air interdiction missions cancelled by weather.
14	Percent	Of air interdiction missions flown with IFF systems functioning and positive control of aircraft.

ART 3.3.1.3 CONDUCT NAVAL SURFACE FIRE SUPPORT

3-10. Apply fires provided by Navy surface gun, missile, and electronic warfare systems to support a unit or units tasked with achieving the commander's objectives. (FM 3-09.32) (USATRADOC DCS-DOC/ALSA)

No.	Scale	Measure
01	Yes/No	Naval surface fire support achieves desired result.
02	Yes/No	Naval surface fire support platform is available and within range.
03	Yes/No	Was the conduct of naval surface fire support accomplished in accordance with established rules of engagement?
04	Time	To get ordnance on target after initiating task.
05	Time	To provide adjustment data after observing first rounds.
06	Time	To accomplish targeting process for fires.
07	Time	To plan and coordinate for naval surface fire support.
08	Percent	Of total fire support missions requested by units executed.
09	Percent	Of the probability of a hit when selecting the correct munitions under sufficient conditions.
10	Percent	Of the probability of catastrophic, mobility, or firepower kill when selecting the correct munitions under existing conditions.
11	Percent	Of high-priority missions executed within specified time.
12	Percent	Of missions fired achieving desired target damage.

No.	Scale	Measure
13	Percent	Of preplanned targets successfully attacked during operations.
14	Percent	Of desired results achieved by the expected conclusion of a given phase of the operation.
15	Percent	Of naval cannon and missile systems available to deliver ordnance.
16	Percent	Of enemy forces destroyed, delayed, disrupted, or degraded.
17	Percent	Of total target list successfully engaged.
18	Percent	Of unplanned enemy targets successfully engaged.
19	Percent	Of the ship's basic load of ordnance available for use in lethal attack.
20	Number	Of naval surface fire support systems available.



ART 3.3.2 CONDUCT NONLETHAL FIRE SUPPORT—OFFENSIVE INFORMATION OPERATIONS

3-11. Employ nonlethal assets to impair the performance of enemy personnel and equipment. (FM 3-13) (USACAC).

No.	Scale	Measure
01	Yes/No	Offensive IO achieves desired result.
02	Yes/No	Was the conduct of nonlethal fire support/offensive information operations accomplished in accordance with established rules of engagement?
03	Time	To initiate offensive IO.
04	Time	To achieve desired damage levels on enemy information systems.
05	Time	To observe results of attacks on enemy information systems.
06	Percent	Of operations plans and operations orders that integrate offensive IO with lethal fire support.
07	Percent	Of tactical plans that include an offensive IO plan.
08	Percent	Of all enemy information systems evaluated as candidates for attack.
09	Percent	Of attacks on enemy information systems that occur without also resulting in damage to friendly information systems.
10	Percent	Of offensive information operations missions that achieve desired effects on enemy.
11	Percent	Of tasked offensive information operations missions conducted.
12	Percent	Of enemy information systems included on high-priority target list.
13	Percent	Of enemy backup and alternate information systems attacked concurrent with attacks on primary systems.
14	Percent	Of reduction in enemy communications emissions after attack by offensive IO systems.
15	Percent	Of enemy force degradation due to offensive IO.

ART 3.3.2.1 CONDUCT MILITARY DECEPTION

3-12. Execute actions to deliberately mislead enemy/adversary military decision makers as to friendly military capabilities, intentions, and operations, thereby causing the enemy/adversary to take specific actions (or inactions) that contribute to accomplishing the friendly mission. Military deception includes simulative deception, simulative electronic deception, imitative electronic deception, and manipulative electronic deception. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Achieve deception objective.
02	Yes/No	Integrate military deception effort with other operations.
03	Yes/No	Deception effort conforms to instructions from higher headquarters, statutory requirements, and international agreements.
04	Yes/No	Deception effort supports the commander's intent.
05	Yes/No	Identify, then exploit target biases.
06	Yes/No	Maintain OPSEC throughout the process.

No.	Scale	Measure
07	Yes/No	Use a variety of sources—physical, electronic, imitative, simulative, and manipulative—to transmit the deception story to the enemy.
08	Time	To provide a deception plan to support a branch or sequel.
09	Time	For enemy to identify deception after commencing operations.
10	Time	To implement preplanned deception plan.
11	Time	To identify key enemy decision makers.
12	Time	To identify enemy critical intelligence indicators.
13	Time	To assess OPSEC measures protecting military deception operation from hostile detection and unwitting disclosure to friendly elements.
14	Percent	Of enemy force decoyed away from the area of the unit's decisive operation.
15	Percent	Of operations plans and orders that contain a military deception appendix to the IO annex.
16	Percent	Of friendly deception operations resulting in enemy reallocating its resources.
17	Percent	Of enemy critical intelligence indicators successfully supplied with false or misleading information.
18	Percent	Of deception events executed at the time and location specified.
19	Percent	Of physical and operational environment effectively used to support deception effort.
20	Percent	Of false information contained in the deception story.
21	Number	Of physical, technical, and administrative means available to convey information to the deception target.

ART 3.3.2.2 CONDUCT ELECTRONIC ATTACK

3-13. Employ jamming, electromagnetic energy, or directed energy against personnel, facilities, or equipment. Use deliberate radiation, reradiation, or reflection of electromagnetic energy to degrade, neutralize, or destroy enemy combat capability. ART 3.3.2.2 includes determining the signal to jam (or target with electromagnetic or directed energy) and the desired result, selecting the jamming method, initiating jamming, determining the jamming effects on the target, and adjusting jamming. (FM 34-40) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Achieve electronic attack objective.
02	Yes/No	Was the conduct of electronic attack in accordance with established rules of engagement?
03	Time	To initiate electronic attack.
04	Time	To create a frequency deconfliction plan.
05	Time	To plan electronic attack.
06	Time	To prepare to conduct electronic attack including moving systems into place and conducting rehearsals and precombat inspections.
07	Percent	Of operations plans and operations orders that integrate electronic attack with lethal fire support.

No.	Scale	Measure
08	Percent	Of electronic attacks that achieve desired results on enemy.
09	Percent	Of tasked electronic attacks conducted.
10	Percent	Of reduction in enemy communications emissions after electronic attack.
11	Percent	Of enemy force degradation due to electronic attack.
12	Percent	Of available electronic attack systems that are mission capable.
13	Number	Of available electronic attack systems.

ART 3.3.2.3 NOMINATE COMPUTER NETWORK ATTACK TARGETS

3-14. Nominate targets to disrupt, deny, degrade, or destroy information in computers and computer networks, or the computers and networks themselves. This is a corps-level task. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Identify computer network attack targets.
02	Yes/No	Were CNA targets nominated in accordance with established rules of engagement?
03	Time	To submit computer network attack targets to operational echelons.
04	Time	To receive results of computer network attack.
05	Percent	Of enemy information system not engaged by computer network attack that is targeted for attack by lethal systems.

ART 3.3.2.4 CONDUCT PSYCHOLOGICAL OPERATIONS (PSYOP)

3-15. Integrate planned psychological messages, products, and actions into combat operations or in support of military operations other than war. Psychological operations influence foreign target audiences in the AO to support achieving national objectives and military operations. (FM 3-05.30) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Commander controls the flow of information to the target audience to influence its behavior in accordance with national/joint force commander objectives.
02	Yes/No	Was the conduct of PSYOP done in accordance with established rules of engagement?
03	Time	To initiate PSYOP plan after receiving warning order.
04	Time	To modify PSYOP plan to incorporate battlefield and other events.
05	Percent	Of AO covered by friendly force mass media.
06	Percent	Of PSYOP effort focused on stabilizing and reinforcing allied forces and host nation.
07	Percent	Of selected targets for which both lethal attack systems and PSYOP were integrated.
08	Percent	Of target audience reached in PSYOP plan.
09	Percent	Of target audience reached by more than one media in PSYOP plan.
10	Percent	Of PSYOP targets attacked achieving desired results.

No.	Scale	Measure
11	Percent	Of PSYOP themes that have unanticipated results.

ART 3.3.2.4.1 Develop Psychological Operations (PSYOP) Products

3-16. Develop products to support offensive, defensive, stability, and support operations. (FM 3-05.30) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Unit prepares a prototype supported by pertinent product explanation worksheet (PEW) and developed within pre-approved parameters set forth in operation plan/operation order (OPLAN/OPORD) and current ROE.
02	Time	To review product request form.
03	Time	To create product prototype through development process.
04	Time	To track product prototype through development process.
05	Time	To identify criteria used to select PSYOP theme and symbols.
06	Time	To develop product concept.
07	Time	To program the product into the PSYOP plan.
08	Time	To determine media availability.
09	Time	To perform media selection and criteria test.
10	Time	To verify translations.
11	Time	To compare product to cultural standards.
12	Time	For unit requesting target audience information to receive that information from the intelligence community.
13	Time	To develop pertinent target audience analysis worksheet once alerted to requirement.
14	Time	To develop psychological operations products once alerted to requirement.
15	Time	To determine format and content of message.
16	Time	To prepare message outline.
17	Time	To write and edit PSYOP script for radio, loudspeaker, and television message.
18	Time	To complete artwork and paste-up for a poster and leaflet message.
19	Time	To attach prototypes to product folder.
20	Time	To develop a product draft.

ART 3.3.2.4.2 Produce Psychological Operations Products

3-17. Prepare psychological operations products for distribution and dissemination to a target audience. (FM 3-05.30) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Produce products in the target language, in proper format and media, and in the appropriate number of copies in accordance with work order and the product/explanation worksheet.
02	Time	To produce PSYOP products (audio, visual, and audiovisual).

No.	Scale	Measure
03	Time	To request additional production resources from outside agencies.
04	Time	For supporting production resources to produce required PSYOP product.
05	Time	To coordinate printing and audiovisual support.
06	Time	To correctly package and prepare PSYOP products for long-term storage.
07	Percent	Of organic PSYOP production resources mission capable.
08	Percent	Of organic PSYOP production resources committed to other missions.
09	Percent	Of organic PSYOP production resources available for commitment to this mission.
10	Percent	Of accuracy of produced PSYOP products when compared with prototypes.

ART 3.3.2.4.3 Distribute Psychological Operations Products

3-18. Transport psychological operations products to a release point or platform for dissemination to a target audience. (FM 3-05.30) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Transport PSYOP products to the release point or platform for dissemination in accordance with appropriate guidance.
02	Time	To transport produced PSYOP products from the production site to the release point or release platform.
03	Time	To coordinate the transport of produced PSYOP products from the production site to the release point or release platform.
04	Percent	Of produced PSYOP products transported to the correct release point or release platform.

ART 3.3.2.4.4 Disseminate Psychological Operations Products and Messages

3-19. Provide a psychological operations product to a target audience. (FM 3-05.30) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Disseminate PSYOP products in accordance with dissemination order.
02	Yes/No	Employ cross-cultural communication techniques.
03	Yes/No	Was the dissemination of PSYOP products done in accordance with established rules of engagement?
04	Time	To coordinate for dissemination support.
05	Time	To establish dissemination priorities.
06	Time	To integrate dissemination into PSYOP plan.
07	Time	To conduct PSYOP dissemination mission preparations including preparing dissemination platform/system for dissemination mission by mounting loudspeakers, rehearsals, and precombat inspection of dissemination platform/system.
08	Time	To conduct PSYOP dissemination mission planning including determining the appropriate times and locations to disseminate PSYOP product.

No.	Scale	Measure
09	Time	To move to area where PSYOP product and messages are to be disseminated.
10	Time	To disseminate PSYOP products and messages.
11	Time	To establish local security around the dissemination site.
12	Time	To identify key communicators.
13	Percent	Of desired area covered by disseminated PSYOP product.
14	Percent	Of PSYOP products on target area.
15	Percent	Of target audience questions answered within limits of PSYOP mission.
16	Number	Of dissemination resources available.
17	Number	Of dissemination resources available for each type of PSYOP product media group, such as loudspeaker, leaflet, videocassette recorder tape, and television/radio broadcast.

ART 3.3.2.4.5 Test Psychological Operations Products

3-20. Develop and use measures of effectiveness to review psychological operations products. ART 3.3.2.4 includes developing pre and post tests to evaluate the effect of PSYOP on the target audience. (FM 33-1-1) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Revise PSYOP campaign based on post test results.
02	Yes/No	Test disseminated products.
03	Time	To analyze results of pre-/post-testing.
04	Time	To monitor audience reaction.
05	Time	To report effectiveness of the PSYOP plan.
06	Time	To revise the PSYOP plan based on post test results (only required if changes warrant a fragmentary order, FRAGO, to the OPORD).
07	Time	To obtain approval for plan changes and additional products based on results of pre-/post-tests.
08	Percent	Of dissemination missions that monitor the response of the target audience.
09	Percent	Of response of target audience consistent with impact indicators.

ART 3.3.2.5 PROVIDE ILLUMINATION

3-21. Provide friendly forces scheduled or on-call light to support night operations or harass the enemy. (FM 6-20) (USAFAS)

No.	Scale	Measure
01	Yes/No	Illumination support achieves desired result.
02	Yes/No	Weather allows the illumination mission.
03	Time	To get illumination rounds on target after initiating task.
04	Time	To provide adjustment data after observing first rounds.
05	Time	To plan and coordinate for illumination.

No.	Scale	Measure
06	Time	To prepare for firing unit for illumination mission.
07	Percent	Of total illumination missions requested by units executed.
08	Percent	Of friendly fire support systems available to deliver illumination.
09	Percent	Of unplanned illumination missions performed.
10	Percent	Of unit basic load of illumination rounds available.
11	Number	Of fire support systems available to conduct illumination mission.

ART 3.3.2.6 NOMINATE COMPUTER NETWORKS FOR EXPLOITATION

3-22. Nominate targets to disrupt, deny, degrade, or destroy information in computers and computer networks, or the computers and networks themselves. This is a corps-level task. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Identify computer network targets for exploitation.
02	Yes/No	Were computer network exploitation targets nominated in accordance with established rules of engagement?
03	Time	To submit computer network exploitation targets to operational echelons.
04	Time	To receive results of computer network exploitation from operational echelons.
05	Percent	Of enemy information system not exploited that is targeted for attack by lethal systems.

ART 3.3.3 CONDUCT SURVEY OPERATIONS IN SUPPORT OF FIRE SUPPORT SYSTEMS

3-23. Use mechanical or electronic systems to determine dimensional relationships—such as locations, horizontal distances, elevations, directions, and angles—on the earth's surface. (FM 6-2) (USAFAS)

No.	Scale	Measure
01	Yes/No	Complete survey within the time allocated in the operations order.
02	Yes/No	Survey order details priorities and accuracies for primary, alternate, and supplementary positions for firing units and target-locating element.
03	Time	To plan survey operation to include traverse, triangulation, and three-point resection.
04	Time	To prepare for survey operation.
05	Time	To execute survey operation.
06	Time	To enter a new survey control point into the database.
07	Time	To update survey control point in the database.
08	Time	From requesting information to providing desired survey information to firing units.
09	Percent	Of accuracy of survey operation.
10	Percent	Of accuracy of survey control available.
11	Percent	Of positioning and azimuth determining systems operational.

No.	Scale	Measure
12	Number	Of positioning and azimuth determining systems available.

ART 3.3.4 PERFORM METEOROLOGICAL OPERATIONS IN SUPPORT OF FIRE SUPPORT SYSTEMS

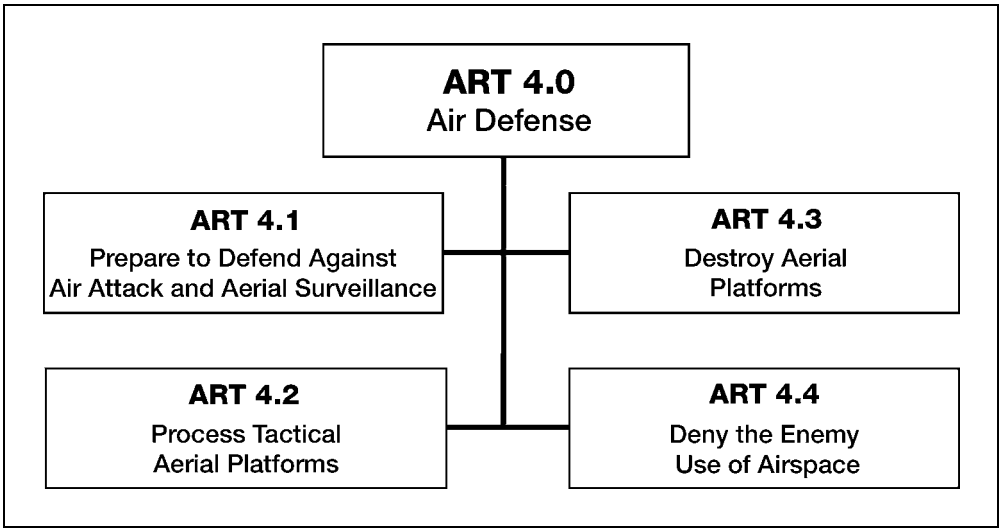
3-24. This task includes the use of meteorological measuring instruments to determine necessary adjustments to individual weapon firing tables to increase the chances for first round hits, conserve ammunition, achieve surprise, and reduce the chances for fratricide. Field artillery meteorological operations involve the determination of current atmospheric conditions. Atmospheric conditions along the trajectory of a projectile or rocket directly affect its accuracy and may cause the projectile or rocket to miss the desired point of impact. A 5 percent to 10 percent effect on the firing tables is possible even with stable atmospheric conditions. (FM 6-2) (USAFAS)

No.	*Scale*	*Measure*
01	Yes/No	Complete meteorological operations within the time allocated in the operations order.
02	Yes/No	Meteorological order details frequency of meteorological observations.
03	Time	To prepare for meteorological operations.
04	Time	To execute meteorological operations.
05	Time	From requesting information to providing desired meteorological information to firing units.
06	Percent	Of meteorological measurement systems operational.
07	Number	Of meteorological measurement systems operational.

Chapter 4

ART 4.0: The Air Defense Battlefield Operating System

The air defense battlefield operating system protects the force from missile attack, air attack and aerial surveillance by any of the following, ballistic missiles, cruise missiles, conventional fixed- and rotary-wing aircraft, and unmanned aerial vehicles. It prevents enemies from interdicting friendly forces, while freeing commanders to synchronize movement and firepower. All members of the combined arms team perform air defense tasks; however, ground-based air defense artillery units execute most Army air defense operations. ART 4.0 includes fires at aerial platforms by both dedicated air defense systems and non-dedicated weapons systems.



Notes: The use of offensive information operations (IO) against enemy aircraft navigational aids and guidance means is addressed in ART 3.3.2.2 (Conduct Electronic Attack).

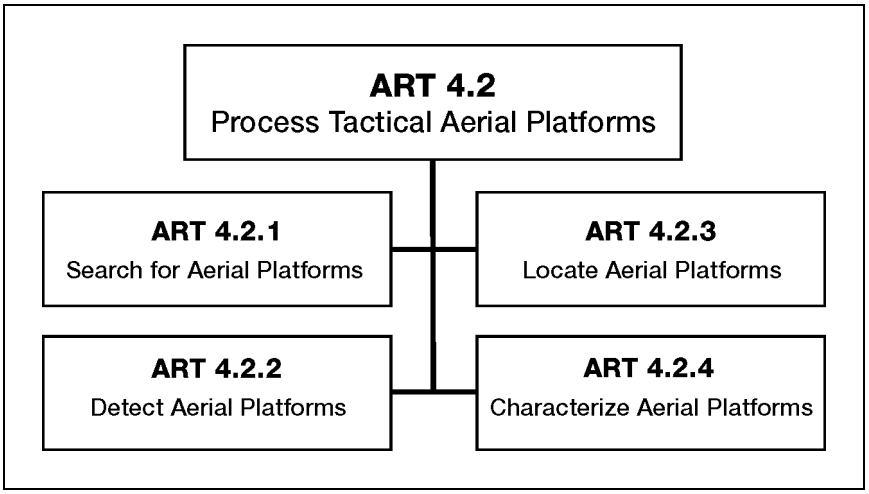
Passive defensive measures are covered in ART 5.3.1.8 (React to Enemy Aerial Attack) and ART 5.3.7.5 (Perform Counterdeception).

Offensive counterair actions by Army forces against enemy aircraft and missiles before launch are addressed in ART 2.0 (Maneuver Battlefield Operating System) and ART 3.0 (Fire Support Battlefield Operating System).

SECTION I – ART 4.1: PREPARE TO DEFEND AGAINST AIR ATTACK AND AERIAL SURVEILLANCE

4-1. ART 4.1 includes tactical movement and emplacement of air defense systems to protect friendly forces, critical assets, or locations. It also includes displacing air defense assets in reaction to or anticipation of changing requirements for air defense coverage as the operation unfolds. (FM 44-100) (USAADASCH)

No.	*Scale*	*Measure*
01	Yes/No	Air defense system mission capable not later than the time specified in the operations order.
02	Time	To develop/refine air defense plan.
03	Time	To conduct troop leading procedures.
04	Time	To conduct/refine air intelligence preparation of the battlefield.
05	Time	To move air defense weapons and sensors into positions where they can be effectively employed.
06	Time	For air defense units to establish necessary sensor to shooter communications linkages.
07	Time	For air defense units to conduct pre-operations checks.
08	Time	To determine weapons control status.
09	Percent	Of friendly air defense weapons and sensors mission capable.
10	Percent	Of losses caused by hostile air attack and surveillance.
11	Percent	Of friendly combined arms systems capable of engaging aerial platforms that are mission capable.
12	Number	Of combined arms systems within AO capable of engaging aerial targets.
13	Number	Of friendly air defense weapons and sensors within (AO) that are mission capable.



SECTION II – ART 4.2: PROCESS TACTICAL AERIAL PLATFORMS

4-2. Provide advanced warning for all aerial platforms, select targets and match the appropriate response to tactical aerial platforms including tactical ballistic missile, taking into account operational requirements and capabilities of systems and units. (FM 44-100) (USAADASCH)

No.	*Scale*	*Measure*
01	Yes/No	Detect, locate and identify all tactical aerial platforms within the AO.
02	Yes/No	Develop and refine early warning plan.
03	Yes/No	Employ all available means to detect tactical aerial platforms.
04	Yes/No	Receive advanced warning of aerial platforms.
05	Yes/No	Process advanced warning of aerial platforms.
06	Yes/No	Transmit advanced warning of aerial platforms.
07	Time	In advance of air attack that advanced warning provided in AO.
08	Percent	Of enemy offensive air sorties against which friendly air defense assets are assigned.
09	Percent	Of enemy air attacks in AO for which early warning provided.
10	Percent	Of force within AO provided early warning of incoming air threat in time to allow them to initiate passive air defense.
11	Percent	Of time that early warning system is operational.
12	Percent	Of air threat warning estimates concerning attack timing and numbers considered accurate by maneuver units.
13	Percent	Of losses caused by hostile air attack and surveillance.
14	Percent	Of AO covered by early warning system.

ART 4.2.1 SEARCH FOR AERIAL PLATFORMS

4-3. Systematically conduct surveillance of a defined area so that all parts of a designated airspace are visually inspected or searched by sensors. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Sensor system used to conduct surveillance detects aerial platforms in its current mode of operations from its current location.
02	Time	To refine air defense plan.
03	Time	To revisit each part of the airspace over the AO—how long does it take for the sensor to conduct a 6400-mil sweep.
04	Percent	Of AO covered by air defense sensors that can detect projected enemy aerial platforms.
05	Percent	Of air defense sensors functioning in AO.
06	Percent	Of air threat warning estimates concerning attack timing and numbers considered accurate by maneuver units.
07	Percent	Of effectiveness of the system conducting the aerial surveillance given current environmental conditions, such as weather and the characteristics of the surrounding terrain to include interference or restrictions placed on its operations resulting from its proximity to other military or civilian equipment.
08	Number	Of air defense sensors functioning in AO.

ART 4.2.2 DETECT AERIAL PLATFORMS

4-4. Determine or detect an aerial platform of possible military significance but cannot confirm it by recognition. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Detect all aerial platforms within the AO.
02	Time	To refine air defense plan.
03	Time	To report the direction of movement, altitude, rate of movement, and to estimate if platform is a possible enemy aerial platform and target.
04	Percent	Of potential aerial platforms determined to be friendly aircraft by an IFF system.
05	Percent	Of potential aerial platforms determined to be friendly aircraft by other than an IFF system.
06	Percent	Of potential aerial platforms in AO detected by air defense sensors.
07	Percent	Of enemy aircraft in AO that are not detected by friendly air defense sensors.
08	Percent	Of air threat warning estimates concerning attack timing and numbers considered accurate by maneuver units.
09	Number	Of potential aerial platforms in AO detected by air defense sensors.
10	Number	Of potential aerial platforms in AO detected by ground observers.
11	Number	Of enemy aircraft in AO that are not detected by air defense sensors.

ART 4.2.3 LOCATE AERIAL PLATFORMS

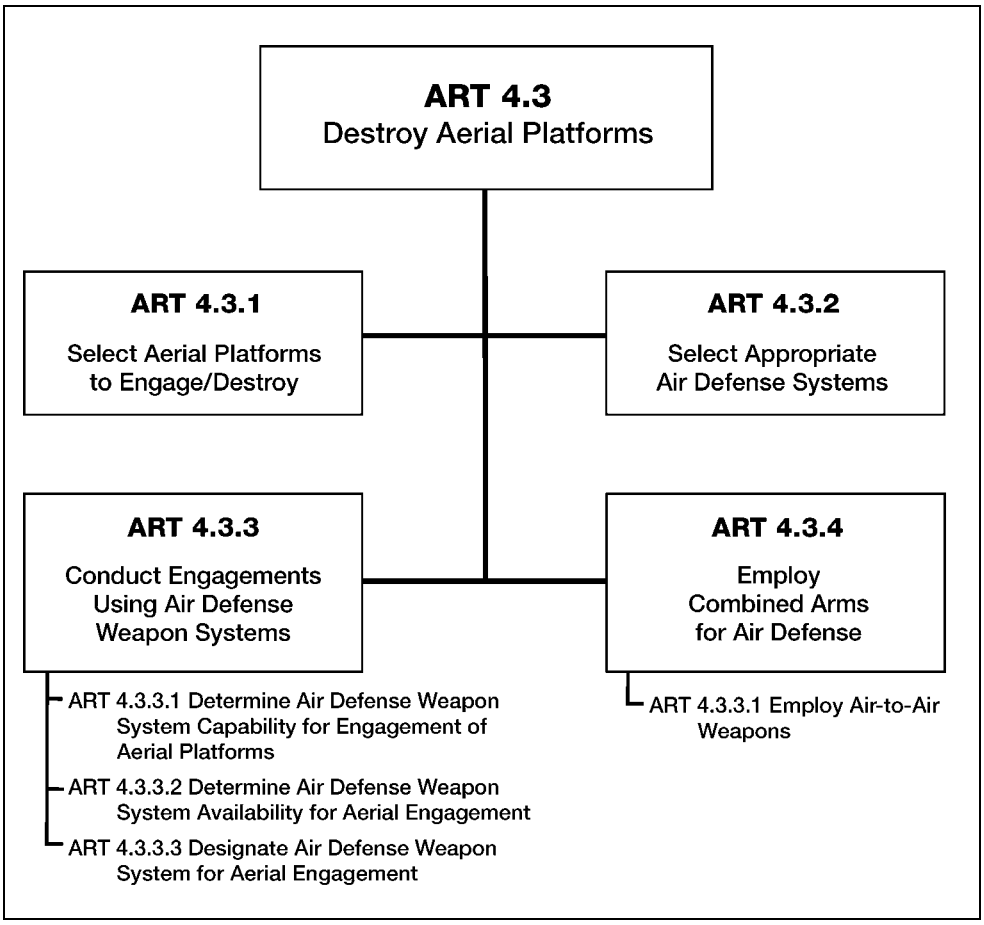
4-5. Confirm the track of an aircraft or missile platform in flight. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Locate all detected aerial platforms within the AO.
02	Time	To refine air defense plan.
03	Percent	Of aerial platforms in AO correctly located with targetable accuracy by air defense sensors.
04	Percent	Of aerial platforms in AO not located with targetable accuracy by air defense sensors.
05	Percent	Of air defense sensors mission capable within the AO.
06	Percent	Of AO covered by air defense sensors.
07	Percent	Of air threat warning estimates concerning attack timing and numbers considered accurate by maneuver units.
08	Number	Of aerial platforms in AO correctly located with targetable accuracy by air defense sensors.
09	Number	Of aerial platforms in AO not located with targetable accuracy by air defense sensors.
10	Number	Of air defense sensors available within the AO.

ART 4.2.4 CHARACTERIZE AERIAL PLATFORMS

4-6. Classifies, types, and identifies tracks and evaluates engageable tracks to determine the threat they pose to friendly assets and areas. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Identify all detected and located tactical aerial platforms within the AO.
02	Time	To refine air defense plan.
03	Time	To identify aerial platform as friendly, hostile, or unknown once it has been detected and located.
04	Percent	Of aerial platforms in AO correctly identified.
05	Percent	Of enemy aircraft in AO that penetrate the air defense sensor network undetected.
06	Percent	Of air threat warning estimates concerning attack timing and numbers considered accurate by maneuver units.
07	Number	Of aerial platforms in AO correctly identified.
08	Number	Of enemy aerial platforms in AO that penetrate the air defense sensor network undetected.



SECTION III – ART 4.3: DESTROY AERIAL PLATFORMS

4-7. Destroy all types of enemy aerial platforms in flight within the AO. (FM 44-100) (USAADASCH)

No.	*Scale*	*Measure*
01	Yes/No	Unit changes its objectives, plan, or operational timetable due to enemy air attack.
02	Yes/No	Was the destruction of an aerial platform done in accordance with established rules of engagement?
03	Time	To assign a specific air defense weapon system to a specific target.
04	Time	For air defense weapon system to acquire, track, and engage as necessary a specific aerial target once assigned responsibility for the engagement of that specific aerial platform.
05	Time	For air defense weapon system to recycle/reload so that it is capable of engaging another aerial platform.
06	Time	To determine weapons control status.
07	Percent	Of losses caused by hostile air attack and surveillance.
08	Percent	Of available systems directed against declared hostile aerial platforms.
09	Percent	Of enemy aerial platforms destroyed.

No.	Scale	Measure
10	Percent	Of detected enemy aerial platforms against which air defense weapons are assigned.
11	Percent	Of target cueing information received by air defense weapon systems.
12	Number	Of enemy aerial platforms destroyed.
13	Number	Of different enemy aerial platforms that can be engaged simultaneously.

ART 4.3.1 SELECT AERIAL PLATFORMS TO ENGAGE/DESTROY

4-8. Analyze each aerial platform to determine if and when it should be destroyed or engaged according to the threat posed, the tactical benefit, and the commander's guidance. ART 4.3.1 requires building and maintaining a complete, accurate, and relevant integrated air picture, and having current control information. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Select aerial platforms that meet the commander's guidance for engagement and destruction.
02	Time	To select aerial platforms to engage/destroy.
03	Time	To determine targeting solution after making decision to engage selected aerial platform.
04	Percent	Of enemy aerial platforms in AO correctly identified and attacked by air defense systems.
05	Percent	Of mission capable air defense systems in AO.
06	Percent	Of available systems directed against declared hostile aerial platforms.
07	Percent	Of aerial targets within the AO that meet the commander's guidance for engagement and destruction.
08	Number	Of enemy aircraft in AO correctly identified and attacked by air defense systems.
09	Number	Of air defense systems in AO.
10	Number	Of fratricide incidents.

ART 4.3.2 SELECT APPROPRIATE AIR DEFENSE SYSTEMS

4-9. Determine the appropriate air defense systems for engaging a particular aerial platform. (FM 4-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Selected system capable of engaging/destroying targeted aerial platform.
02	Time	To select and assign attack system once an enemy aerial platform is identified and located with targeting accuracy.
03	Percent	Probability of selected air defense system hitting targeted aerial platform.
04	Percent	Of enemy aerial platforms selected for attack by dedicated air defense systems.

No.	Scale	Measure
05	Percent	Of enemy aerial platforms engaged by unit small-arms air defense.
06	Percent	Of enemy aerial platforms not selected for attack by dedicated air defense systems.
07	Percent	Of enemy aerial platforms engaged by more than one air defense system.
08	Percent	Of available dedicated air defense systems directed against declared hostile aerial platforms.
09	Number	Of available dedicated air defense systems directed against declared hostile aerial platforms.

ART 4.3.3 CONDUCT ENGAGEMENTS USING AIR DEFENSE WEAPON SYSTEMS

4-10. Use air defense weapon systems to destroy aerial platforms and protect the force. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Friendly course of action must change as a result of enemy air attack.
02	Yes/No	Were air defense weapons used in accordance with established rules of engagement?
03	Time	To warn dedicated air defense units after identification of inbound enemy aerial platforms.
04	Time	For air defense weapon system to acquire, track, and engage as necessary a specific aerial platform once assigned responsibility for the engagement of that specific aerial platform.
05	Time	To determine weapons control status.
06	Time	For air defense weapon system to recycle/reload so that it is capable of engaging another aerial platform.
07	Percent	Of enemy aerial platforms able to penetrate air defense network to deliver ordnance/accomplish mission.
08	Percent	Of all air defense systems positioned to engage the enemy aerial platforms.
09	Percent	Of friendly courses of action that must be changed because of enemy air attack.
10	Percent	Of enemy aerial platforms engaged that are destroyed by each air defense weapon system.
11	Percent	Of friendly casualties attributed to enemy aerial platforms.
12	Percent	Of enemy engaged aerial platforms deterred from delivering their ordnance on target.
13	Percent	Of available air defense systems directed against declared hostile aerial platforms.
14	Number	Of destroyed enemy aerial platforms by air defense weapon system.

ART 4.3.3.1 DETERMINE AIR DEFENSE WEAPON SYSTEM CAPABILITY FOR ENGAGEMENT OF AERIAL PLATFORMS

4-11. Determine the air defense weapon system that can provide the required results. Includes consideration of weapons engagement zones and system characteristics and capability to defeat target. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Available air defense weapons can engage their intended targets.
02	Time	To determine system capability for engaging an identified enemy aerial platform.
03	Percent	Of enemy aerial platforms allocated to each air defense weapon system.
04	Percent	Of aerial platforms engaged within the effective range of the selected weapon system.
05	Number	Of enemy aerial platforms allocated to each weapon system.

ART 4.3.3.2 DETERMINE AIR DEFENSE WEAPON SYSTEM AVAILABILITY FOR AERIAL ENGAGEMENT

4-12. Determine the air defense weapon system available for executing operation. ART 4.3.3.2 includes consideration of weapons control status and determination of physical environment restrictions and engagement criticality. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Selected air defense weapon system is mission capable. Rules of engagement allow it to be used, and it can be brought to a position where it can engage the intended target.
02	Yes/No	Enemy aerial platform must be engaged to accomplish mission.
03	Time	To determine weapons control status.
04	Time	To analyze any restriction caused by physical environment.
05	Time	To determine engagement criticality, the enemy aerial platform must be engaged to accomplish mission.
06	Percent	Of available air defense systems in AO that have the capability to engage a specific hostile aerial platform.
07	Percent	Of targets not attacked in a timely manner due to non-availability of appropriate air defense weapon system.

ART 4.3.3.3 DESIGNATE AIR DEFENSE WEAPON SYSTEM FOR AERIAL ENGAGEMENT

4-13. Designate air defense weapon system to perform an engagement. (FM 4-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Selected system accomplishes the desired task.
02	Time	To determine available systems for engaging target on ID of enemy aerial platform.

No.	Scale	Measure
03	Time	To select appropriate weapon system.
04	Percent	Of available air defense weapon systems.
05	Percent	Of aerial targets not attacked in a timely manner due to non-availability of appropriate air defense weapon systems.
06	Percent	Reliability of air defense weapon system.
07	Number	Of air defense weapon systems used in engagement of aerial platform.
08	Time	For air defense weapon system to acquire, track, and engage as necessary a specific aerial target once assigned responsibility for the engagement of that specific aerial target.
09	Time	For air defense weapon system to recycle/reload so that it is capable of engaging another aerial platform.
10	Percent	Of enemy aerial platforms able to penetrate air defense network to deliver ordnance/accomplish mission.
11	Percent	Of all air defense systems positioned to engage the enemy aerial platforms that engage the enemy aerial platforms.
12	Percent	Of friendly courses of action that must be changed because of enemy air attack.

ART 4.3.4 EMPLOY COMBINED ARMS FOR AIR DEFENSE

4-14. Use weapons systems other than dedicated ground based air defense systems—such as small arms, tank cannons, and antiarmor missiles—to destroy aerial targets. (FM 44-8) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Commander must modify his course of action as a result of enemy air attack.
02	Yes/No	Was the employment of combined arms for air defense done in accordance with established rules of engagement?
03	Time	To warn non-air defense units after identification of inbound enemy aerial platforms.
04	Time	To determine weapons control status.
05	Time	For unit weapon systems to acquire, track, and engage as necessary a specific aerial target once assigned responsibility for the engagement of that specific aerial target.
06	Time	For unit weapon systems conducting self-defense against air attack to recycle/reload so that they are capable of engaging another aerial target.
07	Percent	Of enemy aerial platforms able to penetrate air defense network to deliver ordnance/accomplish mission.
08	Percent	Of all unit weapon systems positioned to engage enemy aerial platforms that engage the enemy aerial platforms.
09	Percent	Of friendly courses of action that must be changed because of enemy air attack.
10	Percent	Of enemy aerial platforms engaged that are destroyed by each weapon system.

No.	Scale	Measure
11	Percent	Of friendly casualties attributed to enemy aerial platforms.
12	Percent	Of enemy engaged aerial platforms deterred from delivering their ordnance on target.
13	Percent	Of weapon system operators using correct aerial engagement aiming techniques.
14	Percent	Reduction in the effectiveness of the enemy's attack as a result of the unit conducting self defense against air attack.
15	Number	Of destroyed enemy aerial platforms by unit weapon system.
16	Number	Of friendly casualties attributed to enemy aerial attack.

ART 4.3.4.1 EMPLOY AIR-TO-AIR WEAPONS

4-15. Use weapons systems carried on aircraft to destroy aerial targets. Army aircraft normally do this in self-defense. (FM 44-100) (USAADASCH)

No.	Scale	Measure
01	Yes/No	Air-to-air weapons destroy intended targets.
02	Yes/No	Maintain mutual support between friendly aircraft throughout engagement.
03	Yes/No	Was the employment of air-to-air weapons accomplished in accordance with established rules of engagement?
04	Time	To warn friendly aerial platforms of inbound enemy aircraft after identification as hostile.
05	Time	That friendly aerial platforms have to prepare to engage inbound enemy aircraft.
06	Time	To designate and initiate selected air-to-air combat drill.
07	Time	To get ordnance on target after initiation of task.
08	Time	To complete air-to-air combat after target identification.
09	Percent	Of total number of air-to-air combat engagements within a given time where friendly system remains undetected while maneuvering into position where it can effectively engage the enemy aerial platform.
10	Percent	Probability of a hit.
11	Percent	Probability of a kill given a hit.
12	Percent	Of enemy air attacks detected early enough to allow engagement.
13	Percent	Casualties of friendly aerial platforms conducting air-to-air combat.
14	Percent	Of engaged enemy aerial platforms destroyed by friendly aerial platforms.
15	Percent	Of enemy aerial platforms not engaged by available friendly aerial platforms.
16	Percent	Of available systems directed against declared hostile aerial platforms.
17	Number	Of enemy aerial platforms destroyed by friendly aerial platforms.

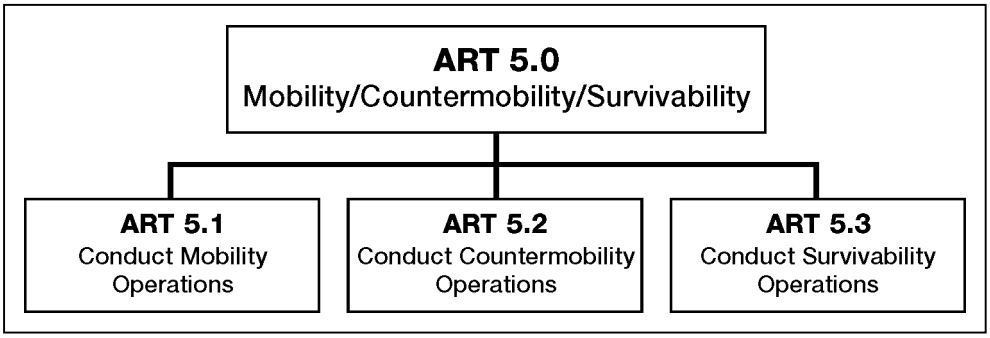
SECTION IV – ART 4.4: DENY THE ENEMY USE OF AIRSPACE

4-16. Prevent or degrade enemy use of airspace through fire potential or other means, such as smoke, not involving directly attacking aerial platforms. (FM 44-100) (USAADASCH)

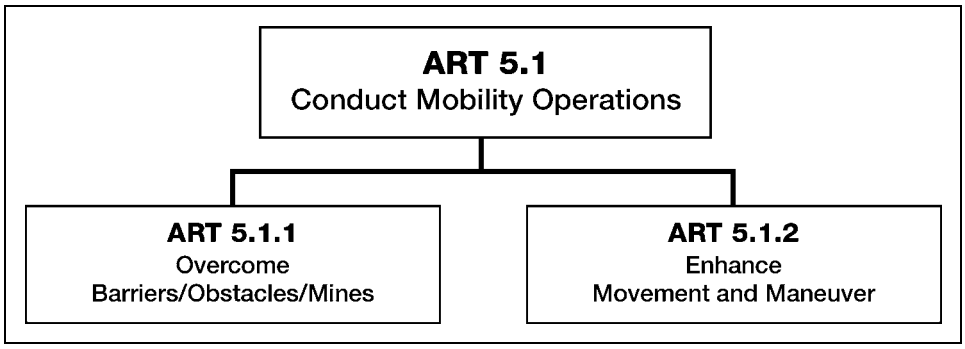
No.	*Scale*	*Measure*
01	Yes/No	The enemy does not attempt to use designated portions of the airspace.
02	Yes/No	Was the denial of enemy use of airspace done in accordance with established rules of engagement?
03	Time	To refine air defense plan.
04	Time	Since last enemy aerial attack.
05	Time	To warn all units within the area of operation after identification of inbound enemy aerial platforms.
06	Time	To report the direction of movement, altitude, rate of movement, and estimated target of enemy aerial platforms.
07	Percent	Of enemy aerial platforms attempting to penetrate into friendly airspace deterred from doing so by friendly fire potential.
08	Percent	Of potential target areas obscured by smoke.
09	Percent	Of losses caused by hostile air attack and surveillance.
10	Percent	Of low level flight corridors rendered unusable by the friendly fire potential.
11	Number	Of errors in the performance of the air defense sensor network in a given time.
12	Number	Of enemy aerial platforms attempting to penetrate into the airspace over friendly ground forces.

Chapter 5

ART 5.0: The Mobility/Countermobility/Survivability Battlefield Operating System



Mobility operations preserve the freedom of maneuver of friendly forces. Mobility tasks include breaching obstacles, increasing battlefield circulation, improving or building roads, providing bridge and raft support, and identifying routes around contaminated areas. Countermobility denies mobility to enemy forces. It limits the maneuver of enemy forces and enhances the effectiveness of fires. Survivability operations protect friendly forces from the effects of enemy weapons systems. They include security operations, hardening facilities, fortifying battle positions, defensive information operations, NBC defense measures, and dispersion.

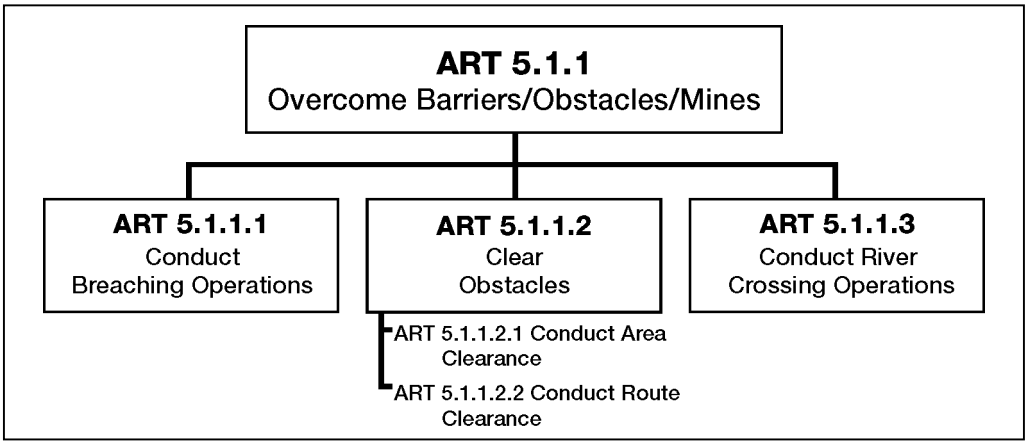


SECTION I – ART 5.1: CONDUCT MOBILITY OPERATIONS

5-1. Maintain freedom of movement for personnel and equipment within an AO without delays due to terrain or barriers, obstacles, and mines. (FM 5-100) (USAES)

Note: The term "breaching system" used in this section includes both manual and mechanical means.

No.	*Scale*	*Measure*
01	Yes/No	Terrain/obstacles/barriers overcome within the period the order specifies.
02	Time	That terrain, barriers, obstacles, and mines delay movement of friendly forces.
03	Time	To conduct route/zone/area reconnaissance to determine terrain trafficability and the location and boundaries of barriers, obstacles, and minefields.
04	Time	For staff to disseminate terrain trafficability and barrier, obstacles, and mine data to subordinate units, after discovery.
05	Time	To conduct successful execution of breach fundamentals—suppress, obscure, secure, reduce, and assault—at the obstacle.
06	Time	To complete mobility activities that improve the unit's capability to cross the terrain, such as applying a rock layer to a combat road and cutting down trees to make a trail.
07	Time	To reduce lanes through obstacles.
08	Time	To complete minefield reduction.
09	Time	To move breaching equipment to breach site.
10	Percent	Of obstacles in the AO that have been breached.
11	Percent	Of breaching systems that are mission capable.
12	Percent	Of engineer effort designed to enhance the unit's capability to cross terrain completed.
13	Number	Of breaching systems that are mission capable.
14	Number	Of friendly/neutral casualties during mobility enhancing activities.



ART 5.1.1 OVERCOME BARRIERS/OBSTACLES/MINES

5-2. Enable a force to maintain its mobility by reducing and/or clearing obstacles. An obstacle is any obstruction that is designed or employed to disrupt, fix, turn, or block the movement of an opposing force and to impose additional losses in personnel, time, and equipment on the opposing force. Obstacles can exist naturally (existing)—such as rivers, mountains, barrier reefs, and cities, be man-made (reinforcing)—such as minefields and antitank ditches, or be a combination of both. A complex obstacle is a combination of different types of individual obstacles that requires more than one reduction technique (explosive, mechanical, or manual) to create a lane through the obstacle. A reinforcing obstacle is an obstacle that is specifically constructed, emplaced, or detonated through military effort. (FM 3-34.2) (USAES)

No.	*Scale*	*Measure*
01	Yes/No	Obstacles/barriers overcome within period the order specifies.
02	Time	That enemy-emplaced obstacles delay friendly force movement.
03	Time	For staff to disseminate barrier, obstacle, and mine data to subordinate units, higher headquarters, and laterally after discovery.
04	Time	To conduct reconnaissance of obstacle focused on answering obstacle intelligence information requirements—obstacle location, length, width, and depth; obstacle composition (wire, mines by type, etc.); soil conditions; locations of lanes and bypasses; and the location of enemy direct fire systems.
05	Time	To conduct successful execution of breach fundamentals—suppress, obscure, secure, reduce, and assault—at the obstacle.
06	Time	To reduce lane through obstacles.
07	Time	To complete mine clearing.
08	Time	To move breaching equipment to breach site.
09	Percent	Of obstacles in the AO that have been breached.
10	Percent	Of breaching systems that are mission capable.
11	Number	Of breaching systems that are mission capable.
12	Number	Of friendly/neutral casualties caused by detonation of mines/explosives.

ART 5.1.1.1 CONDUCT BREACHING OPERATIONS

5-3. Conduct a combined arms operation to project combat power to the far side of an obstacle. Breaching tenets include intelligence, synchronization, mass, breach fundamentals (suppress, obscure, reduce, and assault), and breach organization (support, assault, and breach forces). ART 5.1.1.1 includes the reduction of minefields and other obstacles. Reduction is the creation of lanes through or over an obstacle to allow an attacking force to pass. The number and width of lanes created varies with the enemy situation, the assault force's size and composition, and the scheme of maneuver. The lanes must allow the assault force to rapidly pass through the obstacle. The breach force will reduce, proof (if required), mark, and report lane locations and the land-marking method to higher headquarters. Follow-on units will further reduce or clear the obstacle when required. (FM 3-34.2) (USAES)

No.	*Scale*	*Measure*
01	Yes/No	Complete breaching operation within the period the order specifies.
02	Time	For staff to disseminate barrier, obstacle, and mine data to subordinate units, higher headquarters, and laterally after discovery.
03	Time	That enemy-emplaced obstacles delay friendly force movement.
04	Time	To conduct reconnaissance of barrier/obstacle/minefield.
05	Time	To conduct successful execution of breach fundamentals—suppress, obscure, secure, reduce, and assault—at the obstacle.
06	Time	To reduce lane through obstacles (one lane per assault company, two lanes per task force).
07	Time	To move breaching equipment to breach site.
08	Percent	Of obstacles in the AO that have been breached.
09	Percent	Of breaching systems that are mission capable.
10	Number	Of lanes opened by the breaching operation.
11	Number	Of breaching systems that are mission capable.
12	Number	Of friendly/neutral casualties caused by detonation of mines/explosives.

ART 5.1.1.2 CLEAR OBSTACLES

5-4. Clearing is the total elimination or neutralization of an obstacle or portions of an obstacle. Clearing operations are not conducted under fire and are normally performed after a breaching operation in a friendly AO where an obstacle is a hazard or hinders friendly movement. (FM 3-34.2) (USAES)

No.	*Scale*	*Measure*
01	Yes/No	Complete obstacle clearance mission within the period the order specifies.
02	Time	For staff to disseminate obstacle data to subordinate units, higher headquarters, and laterally after discovery.
03	Time	To conduct reconnaissance of obstacle focused on answering obstacle intelligence information requirements—obstacle location, length, width, and depth; obstacle composition (wire, mines by type, etc.); soil conditions; locations of lanes and bypasses; and the location of enemy direct fire systems.

No.	Scale	Measure
04	Time	To plan how to clear the obstacle.
05	Time	To clear the obstacles.
06	Time	To move equipment to the area where the clearance mission takes place.
07	Percent	Of obstacle that has been removed or neutralized.
08	Percent	Of systems committed to the clearance mission that are mission capable.
09	Number	Of lanes opened by the reducing operation.
10	Number	Of systems that are mission capable.
11	Number	Of friendly/neutral casualties during the clearance mission.

ART 5.1.1.2.1 Conduct Area Clearance

5-5. Area clearance is the total elimination or neutralization of an obstacle or portions of an obstacle in a designated area. (FM 3-34.2) (USAES)

No.	Scale	Measure
01	Yes/No	Complete area clearance mission within the period the order specifies.
02	Time	That obstacles delay friendly force movement.
03	Time	For staff to disseminate obstacle data to subordinate units, higher headquarters, and laterally after discovery.
04	Time	To conduct area reconnaissance.
05	Time	To plan how to clear the area.
06	Time	To clear the area.
07	Time	To move equipment to the area where the clearance mission takes place.
08	Percent	Of area that has been cleared.
09	Percent	Of systems committed to the clearance mission that are mission capable.
10	Number	Of area clearance systems that are mission capable.
11	Number	Of friendly/neutral casualties during the area clearance mission.

ART 5.1.1.2.2 Conduct Route Clearance

5-6. A route clearance is a combined arms operation conducted to remove mines and other obstacles along preexisting roads and trails. (FM 3-34.2) (USAES)

No.	Scale	Measure
01	Yes/No	Accomplish route clearance within the period the order specifies.
02	Time	That obstacles along the route delay the friendly force movement.
03	Time	For staff to disseminate obstacle data to subordinate units, higher headquarters, and laterally after discovery.
04	Time	To conduct route reconnaissance.
05	Time	To plan how to clear the route.
06	Time	To clear the route.
07	Time	To move equipment from its current location to the route where the clearance mission takes place.
08	Time	To establish security along portion of the route being cleared.

No.	Scale	Measure
09	Percent	Of route cleared within the period the order specifies.
10	Percent	Of systems committed to route clearance that are mission capable.
11	Percent	Of increase in transportation/maneuver efficiency due to the completion of route clearance mission.
12	Number	Of obstacles along the route that have been cleared.
13	Number	Of breaching systems that are mission capable.
14	Number	Of friendly/neutral casualties during the route clearance mission.

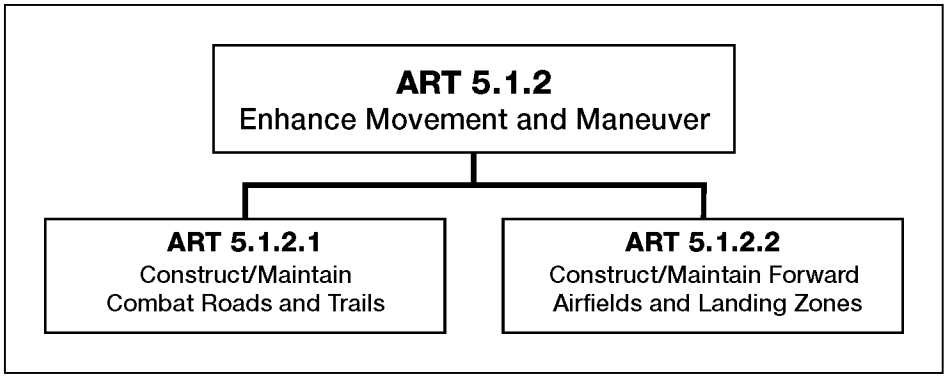
ART 5.1.1.3 CONDUCT RIVER CROSSING OPERATIONS

5-7. A river crossing operation is a combined arms operation to project combat power across a terrain feature, wet or dry, that is too wide to overcome by self-bridging. A river crossing requires special planning and support. METT-TC factors dictate the type of crossing (hasty, deliberate, or retrograde). ART 5.1.1.3 includes preparing access and egress routes, employing crossing means (bridging and rafts), and operating an engineer regulating point. Crossing fundamentals include surprise, extensive preparation, flexible plan, traffic control, organization, and speed. (FM 90-13) (USAES)

Note: The engineer bridge/raft/assault boat systems percentages in this task apply to the individual ribbon bridge bays and rafts, and to individual assault boats and not to a ribbon or assault bridge set as a whole.

No.	Scale	Measure
01	Yes/No	Accomplish river crossing within the period the order specifies.
02	Time	That river obstacle delays friendly force movement.
03	Time	To conduct area reconnaissance of the terrain surrounding the river.
04	Time	To plan the river crossing.
05	Time	For staff to disseminate data concerning the river to subordinate units, higher headquarters, and laterally after determination.
06	Time	To move engineer bridging equipment to the crossing site.
07	Time	To establish conditions necessary for success, such as suppressing enemy systems overwatching the river, breaching minefields and other obstacles barring access to the river banks, and preparing access and egress routes.
08	Time	To emplace/construct crossing assets.
09	Time	To complete river crossing.
10	Percent	Of crossing unit that has moved to the far shore of the river.
11	Percent	Of engineer bridge/raft/assault boat systems that are mission capable.
12	Percent	Of crossing area seeded with obstacles, if conducting a retrograde crossing.
13	Number	Of bridges/crossing sites established.
14	Number	Of engineer bridge/raft/assault boat systems that are mission capable.
15	Number	Of friendly casualties due to accidents/enemy action during the river crossing.

No.	Scale	Measure
16	Number	Of obstacles emplaced within the crossing area, if conducting a retrograde crossing.
17	Rate	Per hour that personnel/tactical vehicles/combat vehicles can cross the river.



ART 5.1.2 ENHANCE MOVEMENT AND MANEUVER

5-8. Enhance force mobility in the forward area by constructing or repairing combat roads, trails, and forward airfields and landing zones to facilitate the movement of personnel, equipment, and supplies. (FM 5-100)(USAES)

Note: Mobility enhancing systems referred to in this task include, but are not limited to: bulldozers, road graders, armored combat earthmovers, dump trucks, cranes, scoop loaders, and explosives used to remove obstacles.

No.	Scale	Measure
01	Yes/No	Mobility enhancing activity was completed within the period specified in the order.
02	Time	To respond to an event (natural disaster or combat activity) that impacts the unit's movement and maneuver.
03	Time	That the preparation and execution of unit operations are delayed due to a natural disaster or combat activity that impacts the unit's movement and maneuver.
04	Time	To conduct a route/area reconnaissance of location where mobility enhancing activity is required.
05	Time	For staff to disseminate event data to subordinate units, higher headquarters, and laterally after discovery.
06	Time	To plan for the mobility enhancement effort.
07	Time	To move mobility enhancing systems to work site.
08	Time	To establish conditions necessary for the success of the mobility enhancement effort, such as establishing security, gaining permission from local authorities for construction, and obtaining supplies—gravel, sand, airfield mats, soil stabilization systems, etc.—necessary for construction.
09	Time	To complete mobility enhancing activity.

No.	Scale	Measure
10	Time	Of movement between given points reduced due to the mobility enhancing activity.
11	Percent	Of mobility enhancing activity completed.
12	Percent	Of mobility enhancing systems available to the commander that are committed to the task.
13	Percent	Increase in unit mobility and maneuver due to completion of the mobility enhancing activity.
14	Number	Of mobility enhancing systems that are mission capable.
15	Number	Of necessary and unnecessary environmentally harmful incidents, such as petroleum spills in watersheds and soil spills into fish habitats.
16	Number	Of friendly/neutral casualties during the mobility enhancing activity.

ART 5.1.2.1 CONSTRUCT/MAINTAIN COMBAT ROADS AND TRAILS

5-9. Prepare and maintain routes for equipment and personnel. ART 5.1.2.1 includes delineating routes, conducting reconnaissance, clearing ground cover, performing earthwork, providing drainage, stabilizing soil, and preparing the road surface for transit by Army combat and tactical vehicles. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	Complete combat road and trail construction/maintenance operation within the period the order specifies.
02	Time	To respond to an event (natural disaster or combat activity) that impacts existing combat roads and trails.
03	Time	That the preparation and execution of unit operations are delayed due to a natural disaster or combat activity that impacts the unit's capability to use a combat road or trail.
04	Time	To conduct area reconnaissance of location where the construction/repair of combat roads and trails will take place.
05	Time	For staff to disseminate reconnaissance results to subordinate units, higher headquarters, and laterally.
06	Time	To plan the construction/maintenance of combat roads and trails.
07	Time	To establish the conditions necessary for success of the construction/maintenance effort, such as establishing security, gaining permission from local authorities for construction, and obtaining supplies, such as gravel, sand, and soil stabilization systems.
08	Time	To move mobility enhancing systems to the work site.
09	Time	To construct/improve/repair the required combat roads and trails.
10	Time	Of movement between given points reduced due to the construction/maintenance of combat roads and trails.
11	Percent	Of combat roads and trails construction/maintenance operation completed.
12	Percent	Reduction in speed of vehicles traversing existing combat roads and trails due to existing environmental conditions, such as snow, ice, and grade.
13	Percent	Of mobility enhancing systems available to the tactical force commander that are committed to the task.
14	Percent	Increase in movement time during the actual repair of combat roads and trails.

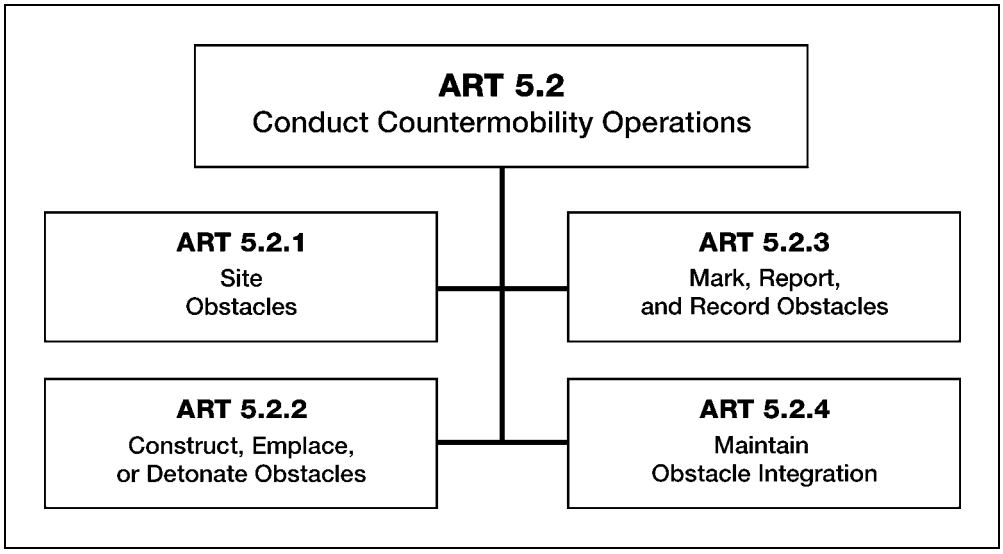
No.	Scale	Measure
15	Percent	Decrease in movement time due to construction of combat roads & trails.
16	Number	Of mobility enhancing systems that are mission capable.
17	Number	Of friendly/neutral casualties during the combat roads and trails construction/maintenance operation.
18	Number	And type of vehicles unable to traverse existing terrain, combat roads, and trails.
19	Number	And type of vehicles able to traverse combat roads and trails after their construction/maintenance.
20	Number	Of necessary and unnecessary environmentally harmful incidents such as petroleum spills in watersheds and soil spills into fish habitats.

ART 5.1.2.2 CONSTRUCT/MAINTAIN FORWARD AIRFIELDS AND LANDING ZONES

5-10. Prepare and maintain landing zones and landing strips to support Army and joint aviation ground facility requirements. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	Complete forward airfield/landing zone construction/maintenance effort within the period the order specifies.
02	Time	To respond to an event (natural disaster or combat activity) that negatively impacts the capability of existing forward airfields and landing zones.
03	Time	That the preparation and execution of unit operations are delayed due to a natural disaster or combat activity that negatively impacts a unit's use of existing forward airfields and landing zones.
04	Time	To conduct an area reconnaissance of the current location of forward airfields and landing zones that have been negatively impacted due to an event, or of proposed locations for forward airfields and landing zones.
05	Time	For the staff to format and disseminate information obtained by the area reconnaissance to subordinate units, higher headquarters, and laterally.
06	Time	To plan for the construction/repair of forward airfields and landing zones.
07	Time	To establish the conditions necessary for success of the construction/repair effort, such as establishing security, gaining permission from local authorities, and obtaining supplies, such as gravel, sand, airfield mats, and soil stabilization systems.
08	Time	To move mobility enhancing systems to the work site.
09	Time	To complete construction/repair of the forward airfield or landing zone.
10	Percent	Reduction in forward airfield/landing zone capacity due to existing environmental conditions, such as snow, ice, and fog.
11	Percent	Of forward airfield/landing zone construction/repair completed.
12	Percent	Of mobility enhancing systems available to the tactical force commander that are committed to the task.
13	Percent	Increase in capacity of unit forward airfields and landing zones due to completion of the construction/repair effort.
14	Percent	Of forward airfields and landing zones in the AO with approaches compatible with Army fixed-wing operational support aircraft.

No.	Scale	Measure
15	Percent	Of forward airfields and landing zones in the AO with navigational aids allowing for landings in bad weather.
16	Distance	Between existing/proposed forward airfields and landing zones.
17	Number	Of mobility enhancing systems that are mission capable.
18	Number	And types of aircraft unable to use existing forward airfields and landing zones.
19	Number	And types of aircraft able to use forward airfields and landing zones after their construction/maintenance.
20	Number	And types of aircraft able to use forward airfields and landing zones simultaneously—maximum on ground—after their construction/repair.
21	Number	Of friendly/neutral casualties during the construction/repair of forward airfields and landing zones due to accidents/enemy action.
22	Number	Of necessary and unnecessary environmentally harmful incidents, such as petroleum spills in watersheds and soil spills into fish habitats.



SECTION II – ART 5.2: CONDUCT COUNTERMOBILITY OPERATIONS

5-11. Countermobility operations involve constructing reinforcing obstacles integrated with fires to inhibit the maneuver of an enemy force, increase time for target acquisition, and increase weapon effectiveness. Commanders integrate obstacle planning into the military decision making process (MDMP) (see FM 101-5), integrate obstacles into the concept of operations (primarily through proper siting), and maintain integration through obstacle turnover, protection, and tracking. The force constructs, emplaces, or detonates tactical and protective obstacles to reinforce existing obstacles. Tactical obstacles are designed and integrated with fires to achieve a tactical effect—disrupt, fix, turn, or block. The three types of tactical obstacles are directed obstacles, situational obstacles, and reserve obstacles. They are distinguished by the differences in execution criteria. Protective obstacles are a key component of survivability operations. (See ART 5.3, Conduct

Survivability Operations.) The force may employ any type of individual obstacle as a tactical obstacle. (FM 90-7) (USAES)

Note: The term "countermobility systems" used in this section is generic in nature and includes both manual and mechanical means, such as sapper units, cratering demolition kits, and mine dispensing systems.

No.	*Scale*	*Measure*
01	Yes/No	Friendly obstacle effect accomplishes commander's guidance (block, disrupt, fix, or turn).
02	Yes/No	Emplace obstacles in accordance with restrictions established by higher headquarters, to include obstacle control measure graphics and ROE.
03	Yes/No	Fires (direct and indirect) are integrated in the obstacle plan and are effective when required.
04	Time	Enemy forces delayed in the conduct of their movement and maneuver due to friendly obstacles. (Delay time dependent upon type of effect.)
05	Time	Required by the enemy to repair/replace facilities (such as bridges, railroad switching yards, dockyard cranes, and airfield runways) damaged/destroyed by friendly countermobility efforts.
06	Time	To conduct area reconnaissance of proposed locations of obstacle complexes.
07	Time	For staff to format and disseminate information obtained by the area reconnaissance to subordinate units, higher headquarters, and laterally.
08	Time	To conduct terrain analysis to assist in selecting obstacle locations.
09	Time	To plan construction of the obstacle effort.
10	Time	To establish conditions necessary for construction of obstacles, such as establishing security and moving Class IV and Class V material to obstacle locations.
11	Time	To move countermobility systems to work site.
12	Time	To emplace obstacles.
13	Time	To employ fires when enemy is engaged in friendly obstacles.
14	Percent	Of countermobility effort completed.
15	Percent	Of total available countermobility effort in a given time not used because of poor management.
16	Percent	Of enemy forces unable to reach their objective due to obstacles.
17	Percent	Of mobility corridors and avenues of approach closed to enemy maneuver by friendly obstacles.
18	Percent	Casualties inflicted on the enemy by friendly obstacles.
19	Percent	Of available countermobility assets that are mission capable.
20	Percent	Of enemy sustainment capability interdicted by friendly obstacle efforts.
21	Percent	Of enemy engineering capability devoted toward enhancing enemy mobility and maneuver.
22	Percent	Of friendly capability devoted to conducting countermobility operations.
23	Percent	Of friendly fire support systems used to emplace field artillery- and air-delivered obstacles.

No.	Scale	Measure
24	Number	Of enemy main supply routes and lines of communication interdicted by friendly obstacles.
25	Number	Of friendly and civilian casualties during the conduct of countermobility operations.
26	Number	Of available countermobility assets that are mission capable.
27	Number	Of enemy potential courses of action no longer feasible due to friendly countermobility efforts.

ART 5.2.1 SITE OBSTACLES

5-12. Determine the location of individual obstacles based on the enemy force (target), desired location of massed fires, tentative weapon system positions, and the intended effect (disrupt, fix, turn, or block). ART 5.2.1 includes verifying that the obstacle is covered by fires, noting locations of fire control measures and obstacles, and recording the appropriate data on range cards. (FM 90-7) (USAES)

No.	Scale	Measure
01	Yes/No	Obstacle location accomplishes intended effect when integrated with available fires.
02	Yes/No	Emplace planned obstacles in accordance with restrictions established by higher headquarters, to include obstacle control measure graphics and ROE.
03	Yes/No	Planned obstacles have a reasonable probability of being emplaced, given protected availability of countermobility systems, supplies, manpower, and time.
04	Yes/No	Coordination takes place between organization designing and designating the obstacles and the supported unit to ensure obstacle coverage by fires.
05	Time	To conduct terrain analysis to support selecting locations for obstacles.
06	Time	To conduct area reconnaissance of proposed obstacle locations.
07	Time	For the staff to format and disseminate information obtained by the area reconnaissance to subordinate units, higher headquarters, and laterally.
08	Time	To plan the countermobility effort.
09	Percent	Of mobility corridors and avenues of approach that will be closed to enemy maneuver by friendly obstacles once they are emplaced.
10	Number	Of enemy main supply routes and lines of communication that will be interdicted by friendly obstacles.
11	Number	Of enemy potential courses of action that are no longer feasible due to friendly countermobility efforts.

ART 5.2.2 CONSTRUCT, EMPLACE, OR DETONATE OBSTACLES

5-13. Reinforce the terrain and combine obstacles with fires to disrupt, fix, turn, or block an enemy force. ART 5.2.2 includes emplacing landmines and special purpose munitions; constructing wire obstacles, antitank ditches, tetrahedrons and log obstacles; and detonating explosives to create road craters, destroy bridges, and construct abatises. (FM 90-7) (USAES)

No.	Scale	Measure
01	Yes/No	Friendly obstacle effect accomplishes the commander's intent (block, disrupt, fix, and turn).
02	Yes/No	Emplace obstacles in accordance with restrictions established by higher headquarters, to include obstacle control measure graphics and ROE.
03	Time	Required to conduct area reconnaissance of proposed location of obstacles.
04	Time	For the staff to format and disseminate information from the area reconnaissance to subordinate units, higher headquarters, and laterally.
05	Time	To plan the design of individual obstacles and obstacle complexes.
06	Time	To establish the conditions necessary for obstacle construction, such as establishing security and moving Class IV and V material to obstacle locations.
07	Time	That the obstacle construction effort is delayed due to insufficient engineer support.
08	Time	To move countermobility systems to the work site.
09	Time	To construct, emplace, or detonate obstacles.
10	Percent	Of obstacle effort completed.
11	Percent	Of total available countermobility effort in a given time not used because of poor management.
12	Percent	Of available countermobility assets that are mission capable.
13	Percent	Of friendly fire support systems used to emplace field artillery and air delivered obstacles.
14	Number	Of available countermobility assets that are mission capable.
15	Number	Of friendly and civilian casualties during the construction, emplacement, or detonation of obstacles.

ART 5.2.3 MARK, REPORT, AND RECORD OBSTACLES

5-14. Mark inherently dangerous obstacles to aid in fratricide prevention. Report the intention to emplace obstacles (if required), initiation of construction/emplacement, and completion/execution of obstacles. As a minimum, record the obstacle location, type, and (if applicable) number and types of mines, placement of mines, use of antihandling devices, location of lanes and gaps, and description of marking. (FM 90-7) (USAES)

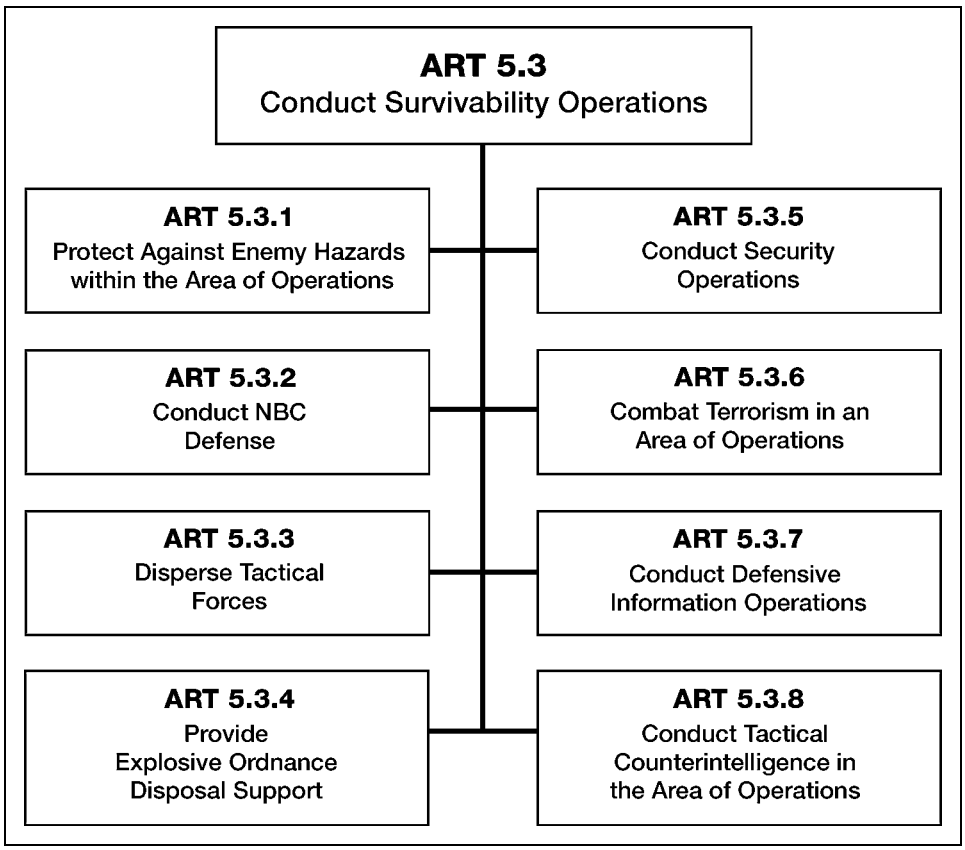
No.	Scale	Measure
01	Yes/No	Mark, report and record all obstacles in accordance with unit SOPs.
02	Time	To identify and determine the limits of minefields and other obstacles.
03	Time	To mark obstacle limits in accordance with US doctrine and international agreements.
04	Time	To transmit obstacle information to higher, subordinate, adjacent, supporting, and supported organizations, and to appropriate host-nation and nongovernmental agencies operating in the AO.
05	Percent	Of obstacle location and composition information correctly recorded in the unit database.

No.	Scale	Measure
06	Percent	Of obstacle location and composition information correctly transmitted to higher, subordinate, adjacent, supporting, and supported organizations, and to appropriate host-nation and nongovernmental agencies operating in the AO.
07	Number	Of friendly and neutral casualties resulting from improperly marked obstacles.

ART 5.2.4 MAINTAIN OBSTACLE INTEGRATION

5-15. Ensure emplaced obstacles remain integrated into the scheme of maneuver. ART 5.2.4 includes turnover and transfer, protection, repair, and tracking of obstacles. Obstacle protection focuses on two tasks: counterreconnaissance to prevent the enemy from gathering obstacle intelligence, and enemy mobility asset destruction to ensure maximum effectiveness of obstacles. Obstacle tracking includes supervising achievement of key milestones as part of the unit's timeline (Class IV/V forward, initiate engagement area development, siting complete), collation and dissemination of obstacle information, and maintenance of records. (FM 90-7) (USAES)

No.	Scale	Measure
01	Yes/No	Obstacle turnover and transfer occur in accordance with doctrinal guidance and international standardization agreements.
02	Yes/No	Friendly unit was able to prevent enemy reconnaissance elements from gaining information on the obstacle.
03	Yes/No	Obstacle tracking occurred within an acceptable level of accuracy, as determined by the unit commander.
04	Time	To plan and coordinate obstacle turnover and transfer.
05	Time	To restore a partially reduced obstacle.
06	Time	To conduct obstacle tracking.
07	Percent	Of enemy reconnaissance assets destroyed while maintaining obstacle integration.
08	Percent	Of enemy mobility assets destroyed before they could reduce friendly obstacles.
09	Number	Of enemy reconnaissance assets destroyed while maintaining obstacle integration.
10	Number	Of enemy mobility assets destroyed before they could reduce friendly obstacles.
11	Number	Of friendly and civilian casualties during the maintenance of obstacle integration.



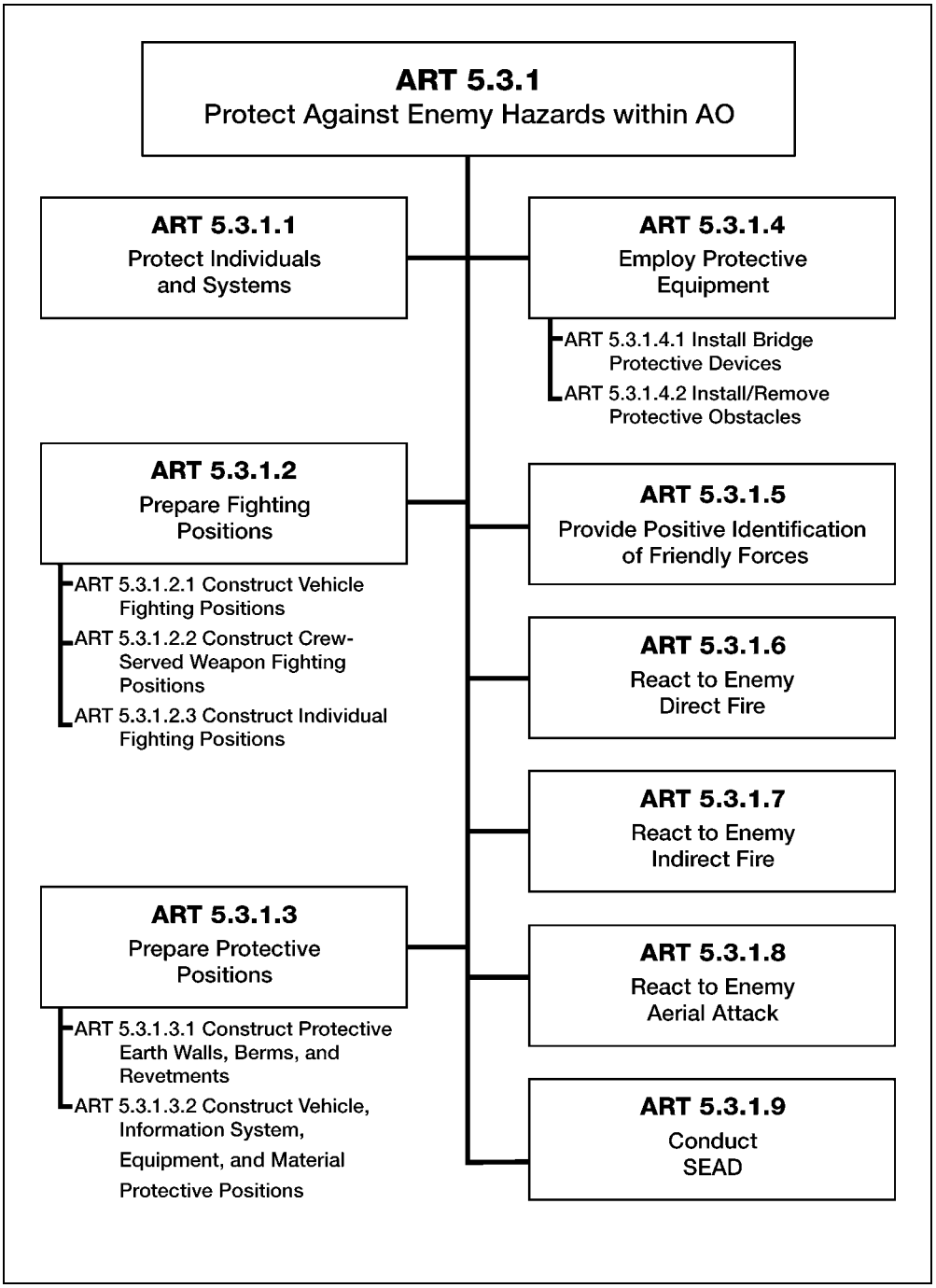
SECTION III – ART 5.3: CONDUCT SURVIVABILITY OPERATIONS

5-16. ART 5.3 is the protection of the tactical force's fighting potential so it can be applied at the appropriate time and place. It includes active and passive measures that the force takes to remain viable and functional by protecting itself from the effects of (or recovering from) enemy attacks. (FM 3-0) (USACAC)

Note: This task branch is supported by ART 1.1.3, Provide Intelligence Support to Force Protection.

No.	*Scale*	*Measure*
01	Yes/No	Unit can continue to conduct operations.
02	Yes/No	Unit losses from hazards are at acceptable levels.
03	Time	Required to conduct an area reconnaissance.
04	Time	To determine that unit has been attacked by NBC weapons.
05	Time	To predict downwind hazard from the use of NBC weapons.
06	Time	To disseminate hazard information to all units in the AO and appropriate headquarters and agencies outside the AO.
07	Time	To harden unit equipment, facilities, and positions.
08	Time	To acquire equipment and supplies necessary to harden a unit/installation.

No.	Scale	Measure
09	Percent	Increase in the time it takes the unit to conduct its operations due to the need to protect against identified hazards.
10	Percent	Of unit that has completed risk management and safety training.
11	Percent	Of friendly casualties due to failure to report the existence of hazards.
12	Percent	Of on-hand, mission-capable equipment necessary to protect the unit against hazards.
13	Percent	Of on-hand supplies necessary to protect the unit against hazards.
14	Percent	Of planned fighting positions completed.
15	Percent	Of planned protective positions completed.
16	Number	Of planned fighting positions completed.
17	Number	Of planned protective positions completed.
18	Number	And types of on-hand equipment necessary to protect the unit against hazards.
19	Number	And types of friendly equipment destroyed or damaged by enemy action.
20	Number	Of incidents of damage to units and facilities in the AO that impact the commander's scheme of maneuver.
21	Number	Of US military/civilian casualties.


ART 5.3.1
Protect Against Enemy Hazards within AO
ART 5.3.1.1
Protect Individuals and Systems
ART 5.3.1.2
Prepare Fighting Positions
ART 5.3.1.2.1 Construct Vehicle Fighting Positions
ART 5.3.1.2.2 Construct Crew-Served Weapon Fighting Positions
ART 5.3.1.2.3 Construct Individual Fighting Positions
ART 5.3.1.3
Prepare Protective Positions
ART 5.3.1.3.1 Construct Protective Earth Walls, Berms, and Revetments
ART 5.3.1.3.2 Construct Vehicle, Information System, Equipment, and Material Protective Positions
ART 5.3.1.4
Employ Protective Equipment
ART 5.3.1.4.1 Install Bridge Protective Devices
ART 5.3.1.4.2 Install/Remove Protective Obstacles
ART 5.3.1.5
Provide Positive Identification of Friendly Forces
ART 5.3.1.6
React to Enemy Direct Fire
ART 5.3.1.7
React to Enemy Indirect Fire
ART 5.3.1.8
React to Enemy Aerial Attack
ART 5.3.1.9
Conduct SEAD

ART 5.3.1 PROTECT AGAINST ENEMY HAZARDS WITHIN THE AO

5-17. Protect the friendly force in an AO by reducing or avoiding the effects of enemy weapons systems. (FM 3-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit can continue to conduct operations.
02	Yes/No	Unit losses from hazards are at acceptable levels.
03	Time	To conduct an area reconnaissance to identify hazards.
04	Time	To disseminate hazard data to all elements operating in the AO.
05	Time	To analyze the impact of identified hazards.
06	Time	To obtain necessary equipment and supplies to protect against hazards.
07	Time	To protect the unit, its facilities, equipment, and supplies against hazards.
08	Percent	Increase in the time it takes the unit to conduct its operations because of the need to protect against identified hazards.
09	Percent	Of unit that has completed risk management and safety training.
10	Percent	Of friendly casualties due to failure to report existence of hazards.
11	Percent	Of on-hand, mission-capable equipment that is necessary to protect the unit against hazards.
12	Percent	Of on-hand supplies necessary to protect the unit against hazards.
13	Percent	Of planned protective positions completed.
14	Number	Of planned protective positions completed.
15	Number	And types of on-hand equipment necessary to protect against hazards.
16	Number	And types of friendly equipment destroyed or damaged by enemy action.
17	Number	Of incidents of damage to units and facilities in the AO that impact the scheme of maneuver.
18	Number	Of US military/civilian casualties due to enemy hazards.

ART 5.3.1.1 PROTECT INDIVIDUALS AND SYSTEMS

5-18. Use protective positions (natural or artificial), measures, or equipment—such as armor, detection equipment, MOPP gear, and collective protective equipment—to reduce the effects of enemy weapons systems. ART 5.3.1.1 includes construction of fighting and survivability positions, conduct of NBC defense, and responding to enemy fires. (FM 3-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit losses from the effects of enemy weapons systems do not keep the unit from accomplishing its mission.
02	Yes/No	Unit losses from enemy weapons systems effects are at acceptable levels.
03	Yes/No	Unit uses the terrain to protect itself from the effects of enemy weapons.
04	Time	To conduct an area reconnaissance to identify areas where risk of enemy attack exists.
05	Time	To analyze the impact of identified hazards in the AO.
06	Time	To revise the plan based on results of the area reconnaissance.

No.	Scale	Measure
07	Time	To disseminate area reconnaissance data and revised execution instructions to all elements operating in the AO.
08	Time	To establish the necessary degree of local security for construction efforts.
09	Time	To obtain the equipment and supplies necessary to protect the unit from the effects of enemy weapon systems.
10	Time	To protect the unit, its facilities, equipment, and supplies from the effects of enemy weapons systems.
11	Percent	Increase in the time it takes the unit to conduct operations because of the need to protect itself from the effects of identified enemy weapons systems.
12	Percent	Of unit personnel trained to use available detection and protection equipment.
13	Percent	Of friendly casualties due to failure to use existing protective equipment and structures.
14	Percent	Of on-hand, mission-capable equipment, such as MOPP gear, necessary to protect the unit from the effects of enemy weapons systems.
15	Percent	Of on-hand supplies necessary to protect the unit from the effects of enemy weapons systems.
16	Percent	Of unit personnel who become casualties due to the faulty use of terrain to protect themselves from the effects of enemy weapons systems.
17	Percent	Of unit personnel who become casualties of the effects of enemy weapons systems due to the faulty employment and use of detection equipment.
18	Percent	Of planned protective positions completed.
19	Number	Of planned protective positions completed.
20	Number	And types of on-hand equipment necessary to protect the unit against the effects of enemy weapons systems.
21	Number	And types of friendly equipment destroyed or damaged by enemy action.
22	Number	Of incidents of damage to units and facilities in the AO that impact the scheme of maneuver.
23	Number	Of US military/civilian casualties from the effects of enemy weapons.

ART 5.3.1.2 PREPARE FIGHTING POSITIONS

5-19. Prepare primary, alternate, and supplementary fighting positions that provide cover, concealment, and protection from the effects of enemy fires for occupants and systems, and allow for fields of fire and maneuver space for combat systems and units engaging the enemy. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	Unit can accomplish its mission using its fighting positions.
02	Time	To conduct an area reconnaissance.
03	Time	To design primary, alternate, and supplementary fighting positions, and decide correct placement to maximize terrain effectiveness.

No.	Scale	Measure
04	Time	To establish the degree of local security necessary for the construction effort.
05	Time	To obtain the equipment and supplies necessary to construct fighting positions.
06	Time	To construct primary, alternate, and supplementary fighting positions with engineer support.
07	Time	To construct primary, alternate, and supplementary fighting positions without engineer support.
08	Percent	Of on-hand equipment and supplies needed to construct fighting positions.
09	Percent	Of personnel trained to properly construct fighting positions.
10	Percent	Of planned fighting positions completed.
11	Percent	Of completed fighting positions constructed to standard.
12	Percent	Of friendly casualties due to improperly constructed or sited fighting positions.
13	Percent	Of planned fighting positions completed.
14	Number	And types of fighting positions completed.
15	Number	Of friendly casualties due to improperly constructed or sited fighting positions.

ART 5.3.1.2.1 Construct Vehicle Fighting Positions

5-20. Construct fighting positions that provide cover, concealment, and protection from direct and indirect fires for combat vehicles, yet allow direct or indirect engagement of enemy forces. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	Unit can accomplish its mission using its vehicle fighting positions.
02	Time	To conduct area reconnaissance.
03	Time	To design primary, alternate, and supplementary vehicle fighting positions, and decide correct placement to maximize terrain effectiveness.
04	Time	To establish the local security necessary for the construction effort.
05	Time	To obtain the equipment and supplies necessary to construct vehicle fighting positions.
06	Time	To construct primary, alternate, and supplementary vehicle fighting positions with engineer support.
07	Time	To construct primary, alternate, and supplementary vehicle fighting positions without engineer support.
08	Percent	Of on-hand equipment and supplies necessary to construct vehicle fighting positions.
09	Percent	Of personnel trained to properly construct vehicle-fighting positions.
10	Percent	Of planned vehicle fighting positions completed.
11	Percent	Of completed vehicle fighting positions constructed to standard.
12	Percent	Of friendly casualties due to improperly constructed or sited vehicle fighting positions.

No.	Scale	Measure
13	Number	Of planning vehicle fighting positions completed.
14	Number	Of friendly casualties due to improperly constructed or sited vehicle fighting positions.

ART 5.3.1.2.2 Construct Crew-Served Weapon Fighting Positions

5-21. Construct fighting positions and or bunkers for crew-served weapons remaining in defensive positions for extended times. Fighting positions provide cover and concealment from direct and indirect fire while allowing coverage of primary and secondary sectors of fire. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	Unit can accomplish its mission using crew-served weapon fighting positions.
02	Time	To conduct area reconnaissance.
03	Time	To design primary, alternate, and supplementary crew-served weapon fighting positions, and decide correct placement to maximize terrain effectiveness.
04	Time	To establish the degree of local security necessary for the construction effort.
05	Time	To obtain the necessary equipment and supplies to construct fighting positions.
06	Time	To construct primary, alternate, and supplementary crew-served weapon fighting positions with engineer support.
07	Time	To construct primary, alternate, and supplementary crew-served weapon fighting positions without engineer support.
08	Percent	Of on-hand equipment and supplies needed to construct crew-served weapon fighting positions.
09	Percent	Of personnel trained to properly construct crew-served weapon fighting positions.
10	Percent	Of planned crew-served weapon fighting positions completed.
11	Percent	Of completed crew-served weapon fighting positions constructed to standard.
12	Percent	Of friendly casualties due to improperly constructed or sited crew-served weapon fighting positions.
13	Number	And types of planned crew-served weapon fighting positions completed.
14	Number	Of friendly casualties due to improperly constructed or sited crew-served weapon fighting positions.

ART 5.3.1.2.3 Construct Individual Fighting Positions

5-22. Construct individual fighting positions that provide cover and concealment from observation and direct and indirect fires. Properly sited individual fighting positions allow soldiers to engage the enemy with their assigned weapons while providing observation and fields of fire that overlap those of other positions. (FM 21-75) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit can accomplish its mission using individual fighting positions.
02	Time	To conduct an area reconnaissance.
03	Time	To design primary, alternate, and supplementary individual fighting positions, and decide correct placement to maximize terrain effectiveness.
04	Time	To establish the degree of local security for the construction effort.
05	Time	To obtain the equipment and supplies to construct fighting positions.
06	Time	To construct primary, alternate, and supplementary individual fighting positions with engineer support.
07	Time	To construct primary, alternate, and supplementary individual fighting positions without engineer support.
08	Percent	Of on-hand equipment and supplies available to construct individual fighting positions.
09	Percent	Of personnel trained to properly construct individual fighting positions.
10	Percent	Of planned individual fighting positions completed.
11	Percent	Of completed individual fighting positions constructed to standard.
12	Percent	Of completed individual fighting positions that can support unit defensive positions, such as vehicle fighting positions and crew-served weapon fighting positions.
13	Percent	Of friendly casualties due to improperly constructed or sited individual fighting positions.
14	Number	Of planned individual fighting positions completed.
15	Number	Of friendly casualties due to improperly constructed or sited individual fighting positions.

ART 5.3.1.3 PREPARE PROTECTIVE POSITIONS

5-23. Provide cover and concealment for personnel, systems, equipment, supplies, and other materiel not directly involved in fighting. This includes medical patients. These positions reduce the risks associated with all forms of enemy contact, such as direct and indirect fires, enemy observations, employment of NBC weapons, etc. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	The use of protective positions preserves the unit's personnel, equipment, and supplies for future missions.
02	Time	To conduct an area reconnaissance.
03	Time	To design protective positions for personnel, systems, equipment, supplies, and other materiel not directly involved in fighting, and decide correct placement to maximize terrain effectiveness.
04	Time	To establish the degree of local security for the construction effort.
05	Time	To obtain the equipment and supplies to construct protective positions.
06	Time	To construct protective positions with engineer support.
07	Time	To construct protective positions without engineer support.
08	Percent	Of on-hand equipment and supplies to construct protective positions.
09	Percent	Of personnel trained to properly construct protective positions.

No.	Scale	Measure
10	Percent	Of planned protective positions completed.
11	Percent	Of completed protective positions constructed to standard.
12	Percent	Of unit facilities not hardened.
13	Percent	Of friendly casualties due to improperly constructed or sited protective positions.
14	Percent	Of personnel casualties or equipment and supplies lost due to the nonavailability of protective positions.
15	Number	And types of planned protective positions completed.
16	Number	Of friendly casualties due to improperly constructed or sited protective positions.
17	Number	Of personnel casualties or equipment and supplies lost due to the nonavailability of protective positions.

ART 5.3.1.3.1 Construct Protective Earth Walls, Berms, and Revetments

5-24. Provide cover, concealment, and protection against direct and indirect fire without restricting the operational capability of systems. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	The use of protective earth walls, berms, and revetments preserves unit personnel, equipment, and supplies for future missions.
02	Time	To conduct an area reconnaissance.
03	Time	To design protective earth walls, berms, and revetments for personnel, systems, equipment, supplies, and other materiel not directly involved in fighting, and to decide correct placement to maximize terrain effectiveness.
04	Time	To obtain the equipment and supplies to construct protective earth walls, berms, and revetments.
05	Time	To establish degree of local security for the construction effort.
06	Time	To construct protective earth walls, berms, and revetments with engineer support.
07	Time	To construct protective earth walls, berms, and revetments without engineer support.
08	Percent	Of on-hand equipment and supplies to construct protective earth walls, berms, and revetments.
09	Percent	Of personnel trained to construct protective earth walls, berms, and revetments.
10	Percent	Of planned protective earth walls, berms, and revetments completed.
11	Percent	Of completed protective earth walls, berms, and revetments constructed to standard.
12	Percent	Of unit facilities not hardened.
13	Percent	Of friendly casualties due to improperly constructed or sited protective earth walls, berms, and revetments.

No.	Scale	Measure
14	Percent	Of personnel casualties or equipment and supplies lost to enemy attack due to the nonavailability of protective earth walls, berms, and revetments.
15	Number	Of planned protective earth walls, berms, and revetments completed.
16	Number	Of friendly casualties due to improperly constructed or sited protective earth walls, berms, and revetments.
17	Number	Of friendly casualties or equipment and supplies lost due to the nonavailability of protective earth walls, berms, and revetments.

ART 5.3.1.3.2 Construct Vehicle, Information System, Equipment, and Material Protective Positions

5-25. Provide cover and concealment for vehicles, information system nodes, equipment, supplies, and other material that do not provide/conduct direct fire. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	The use of vehicle, information systems, equipment, and material protective positions preserves unit personnel, equipment, and supplies for future missions.
02	Time	To conduct an area reconnaissance.
03	Time	To design protective positions for vehicle, information systems, equipment, and material not directly involved in fighting, and decide correct placement to maximize terrain effectiveness.
04	Time	To establish the degree of local security for the construction effort.
05	Time	To obtain the equipment and supplies to construct vehicle, information systems, equipment, and material protective positions.
06	Time	To construct vehicle, information systems, equipment, and material protective positions with engineer support.
07	Time	To construct vehicle, information systems, equipment, and material protective positions without engineer support.
08	Percent	Of on-hand equipment and supplies available to construct vehicle, information systems, equipment, and material protective positions.
09	Percent	Of personnel trained to construct vehicle, information systems, equipment, and material protective positions.
10	Percent	Of planned vehicle, information systems, equipment, and material protective positions completed.
11	Percent	Of completed vehicle, information systems, equipment, and material protective positions constructed to standard.
12	Percent	Of unit vehicles, information systems, equipment, and material supplies not protected by protective positions.
13	Percent	Of friendly casualties due to improperly constructed or sited vehicle, information systems, equipment, and or material protective positions.
14	Percent	Of casualties or equipment and supplies lost due to the nonavailability of vehicle, information systems, equipment, and or material protective positions.
15	Number	Of planned vehicle, information systems, equipment, and material protective positions completed.

No.	Scale	Measure
16	Number	Of friendly casualties due to improperly constructed or sited vehicle, information systems, equipment, and material protective positions.
17	Number	Of casualties or equipment and supplies lost due to the nonavailability of vehicle, information systems, equipment, and material protective positions.

ART 5.3.1.4 EMPLOY PROTECTIVE EQUIPMENT

5-26. Employ individual and collective equipment to protect personnel, systems, and facilities against hazards caused by enemy action. Protective equipment includes individual and collective NBC detection and protective systems. ART 5.3.1.4 includes using other items: such as, bullet-resistant glazing, hydraulically or manually operated vehicle crash barriers, personnel gates designed to limit the number of personnel passing through at one time, intrusion detection systems, security lighting, and security fences. (FM 5-103) (USAES)

No.	Scale	Measure
01	Yes/No	The use of protective equipment preserves unit personnel, equipment, and supplies for future missions.
02	Time	To conduct an area reconnaissance.
03	Time	To plan/revise the plan for employing protective equipment to account for the existing factors of METT-TC.
04	Time	To establish the degree of local security necessary for installing/constructing the protective equipment.
05	Time	To employ protective equipment to harden individuals and facilities.
06	Time	To assume the necessary MOPP level in response to enemy action, given previous MOPP level.
07	Time	To employ protective equipment to harden supply stocks with engineer support.
08	Time	To employ protective equipment to harden supply stocks without engineer support.
09	Time	To emplace warning signs marking the edges of areas contaminated by enemy action, such as the use of NBC weapons.
10	Time	To obtain the protective equipment and systems needed to complete the hardening process.
11	Percent	Of personnel, systems, and facilities hardened by protective equipment and systems.
12	Percent	Of personnel trained to use protective equipment.
13	Percent	Of necessary protective equipment and supplies on hand.
14	Percent	Of protective equipment employed to standard.
15	Percent	Of protective equipment system that is mission capable.
16	Percent	Of friendly casualties due to improperly used protective equipment.
17	Percent	Of casualties or equipment and supplies lost due to the nonavailability of protective equipment.
18	Number	Of mission capable protective equipment systems.

No.	Scale	Measure
19	Number	Of friendly casualties due to improperly used protective equipment.
20	Number	Of personnel casualties or equipment and supplies lost due to the nonavailability of protective equipment.

ART 5.3.1.4.1 Install Bridge Protective Devices

5-27. Provide protective systems for an existing floating bridge or river crossing site. Protect the bridge/site from waterborne demolition teams, floating mines, or floating debris. The three types of floating protective systems are antimine booms, impact booms, and antiswimmer nets. (FM 5-34) (USAES)

No.	Scale	Measure
01	Yes/No	The use of bridge protective equipment preserves the functionality of the bridge for current and future missions.
02	Time	To conduct an area reconnaissance of the river approaches to the bridge.
03	Time	To plan/revise the plan to employ bridge protective equipment to account for the existing factors of METT-TC.
04	Time	To establish the degree of local security for installation/construction of the bridge protective equipment.
05	Time	To employ bridge protective equipment.
06	Time	To widen the bridge or remove interior bridge bays to account for flood condition or heavy debris (for floating bridges).
07	Time	To obtain the bridge protective equipment and systems through the supply system or by local procurement.
08	Percent	Of personnel trained to use bridge protective equipment.
09	Percent	Of on-hand bridge protective equipment and supplies.
10	Percent	Of bridge protective equipment employed to standard.
11	Percent	Of mission-capable bridge protective equipment/systems.
12	Percent	Of bridges damaged due to improperly used bridge protective equipment.
13	Number	Of bridges protected by the proper protective device(s) for the situation.
14	Number	Of mission-capable bridge protective equipment systems.
15	Number	Of friendly casualties due to improperly used protective equipment.
16	Number	Of personnel casualties due to accidents during the installation of bridge protective equipment.

ART 5.3.1.4.2 Install/Remove Protective Obstacles

5-28. Provide friendly forces close-in protection with protective obstacles as part of their force protection plan. ART 5.3.1.4.2 includes employing temporary or permanent protective obstacles and removal or turnover of obstacles to relieving units. (FM 20-32) (USAES)

No.	Scale	Measure
01	Yes/No	The use of protective obstacles preserves unit personnel, equipment, and supplies for future missions.
02	Yes/No	The protective obstacles were properly turned over to the relieving unit. This includes transfer of intelligence, maneuver, fire support, and mobility/countermobility/ survivability information: such as, local enemy, friendly, and civilian situations; direct and indirect fire control measures; minefield composition; marking; and layout.
03	Time	To conduct an area reconnaissance.
04	Time	To plan/revise the plan to employ protective obstacles to account for existing factors of METT-TC.
05	Time	To establish the degree of local security necessary for installation/construction of the protective obstacles.
06	Time	To install/remove protective obstacles, to include proper marking, with engineer support.
07	Time	To install/remove protective obstacles, to include proper marking, without engineer support.
08	Time	To turn over protective obstacles.
09	Time	To properly record and report protective obstacles.
10	Time	To obtain obstacle emplacing equipment and Class IV and V to install protective obstacles.
11	Percent	Of personnel, systems, unit positions, and facilities protected by protective obstacles.
12	Percent	Of personnel trained to install, maintain, and remove protective obstacles.
13	Percent	Of on-hand protective obstacle installation/removal equipment and Class IV and V.
14	Percent	Of protective obstacles installed/removed to standard.
15	Percent	Of protective obstacles properly turned over.
16	Percent	Of friendly casualties due to improperly installed/marked/removed protective obstacles.
17	Number	Of mission-capable protective obstacle installation/removal systems.
18	Number	Of friendly casualties due to improperly installed/marked/removed protective obstacles.

ART 5.3.1.5 PROVIDE POSITIVE IDENTIFICATION OF FRIENDLY FORCES

5-29. Discretely and positively determine, by any means, the identity of tactical units, their equipment and personnel; or of phenomena, such as communications-electronic patterns. Distinguish these forces from hostile or unknown forces and means, one from the other. (FM 100-14) (USASC)

No.	Scale	Measure
01	Yes/No	Unit is able to correctly identify other forces, equipment, and personnel within the area of operations.
02	Time	To refine the force protection plan.
03	Time	Elapsed before enemy begins to mimic identification or recognition procedures.

No.	Scale	Measure
04	Time	To confirm the identified or unidentified friendly unit or system.
05	Time	To confirm the identity of an unidentified target.
06	Time	To pass a target identity to the decision maker.
07	Time	To change codes in IFF systems.
08	Percent	Of force in the AO that has passive identification interrogation capability.
09	Percent	Of IFF systems operating correctly.
10	Percent	Of force in AO using their IFF systems.
11	Percent	Of friendly systems in the AO destroyed by friendly fire.
12	Percent	Of casualties in the AO from friendly fire.
13	Percent	Of positive identification false negatives (friendly identified as enemy) in the AO.
14	Percent	Of positive identification false positives (enemy identified as friendly) in the AO.
15	Percent	Of units accurately reporting their locations.
16	Number	Of penetrations within the AO by unknown targets.
17	Number	Of IFF systems operating correctly in the AO.

ART 5.3.1.6 REACT TO ENEMY DIRECT FIRE

5-30. Return fire at known or suspected enemy positions and take evasive action upon detecting enemy direct fire. (FM 21-75) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit reaction to enemy direct fire allows the unit to complete its mission.
02	Yes/No	Unit retains its cohesion.
03	Yes/No	Collateral damage due to friendly response to enemy direct fire does not result from violations of the law of war or ROE in effect.
04	Time	That unit is delayed from accomplishing its mission due to enemy direct fire.
05	Time	That unit stays within the enemy's engagement area before it can suppress the enemy's weapon systems, find cover from which to engage the enemy, or extract itself from the engagement area.
06	Percent	Of enemy casualties inflicted.
07	Percent	Of friendly casualties.
08	Number	Of friendly and noncombatant casualties.
09	Number	And types of friendly systems rendered nonmission capable by enemy direct fire.

ART 5.3.1.7 REACT TO ENEMY INDIRECT FIRE

5-31. Seek protection under the overhead cover of fighting/protective positions or move rapidly out of the impact area in the direction the unit commander orders. If armored vehicles are available, personnel mount, and the vehicles move out of the impact area in the direction and designated distance ordered by the unit commander. (FM 21-75) (USAIS)

No.	Scale	Measure
01	Yes/No	Unit reaction to enemy indirect fire allows the unit to complete its mission.
02	Yes/No	Unit retains its cohesion.
03	Yes/No	Collateral damage due to the friendly response to enemy direct fire does not result from violations of the law of war or ROE in effect.
04	Time	To report contact to the higher commander.
05	Time	For personnel to either close the hatches on the combat vehicles they are riding in, seek shelter in positions with suitable overhead cover, or seek shelter offered by the terrain immediately around them.
06	Time	For vehicles to move out of the impact area.
07	Time	For dismounted individuals caught without suitable shelter in the impact area to improve their chances of surviving by digging in using resources immediately available to them.
08	Time	To conduct counterbattery/countermortar fires.
09	Percent	Of unit soldiers performing immediate action drill correctly.
10	Percent	Of enemy casualties due to friendly counterbattery/countermortar fires.
11	Percent	Of friendly casualties.
12	Number	Of friendly and noncombatant casualties.
13	Number	And types of friendly systems rendered nonmission capable by enemy indirect fire.

ART 5.3.1.8 REACT TO ENEMY AERIAL ATTACK

5-32. Take passive air defense measures to prevent aircraft from effectively engaging the unit. Passive air defense measures, when the unit is not in the path or target of the enemy aircraft, include moving to cover and concealment and preparing to engage the attacking or any follow-on aircraft. (FM 21-75) (USAIS)

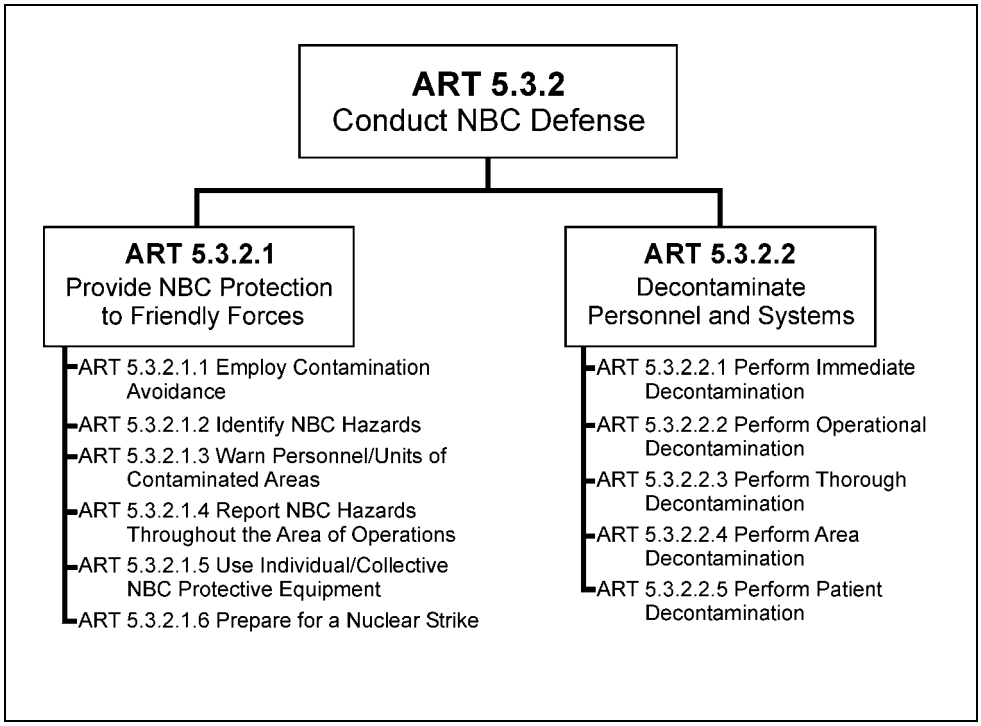
Note: ART 4.3.4 (Employ Combined Arms for Air Defense) addresses active self-defense measures taken against aerial attack by nonair defense units.

No.	Scale	Measure
01	Yes/No	Commander must modify his course of action because of enemy air attack.
02	Time	To warn nonair defense units after identification of inbound enemy aerial platforms.
03	Time	To move to covered and concealed positions.
04	Percent	Of enemy aerial platforms able to penetrate the air defense network to deliver ordnance/accomplish mission.
05	Percent	Of friendly courses of action that must be changed due to enemy air attack.
06	Percent	Of enemy aerial platforms unable to acquire friendly personnel and equipment to attack.
07	Percent	Of friendly casualties attributed to enemy aerial platforms.
08	Number	Of friendly casualties attributed to enemy aerial attack.

ART 5.3.1.9 CONDUCT SUPPRESSION OF ENEMY AIR DEFENSES

5-33. Neutralize, destroy, or temporarily degrade surface-based enemy tactical air defenses by destructive and/or disruptive means. Lethal SEAD seeks the destruction of surface-based enemy tactical air defenses, such as target systems or operating personnel, by destructive means. Examples of destructive SEAD capabilities are bombs, air- and surface-to-surface missiles, air-scatterable mines, and field artillery. Nonlethal SEAD seeks to temporarily deny, degrade, deceive, delay, or neutralize surface-based enemy tactical air defense systems by disruptive means to increase aircraft survivability. Disruptive means may be either active or passive. Active means include: electronic attack by means such as anti-radiation missiles, directed energy, electromagnetic jamming, and electromagnetic deception; expendables, such as chaff, flares, and decoys; tactics, such as deception, avoidance, or evasive flight profiles; and unmanned aerial vehicles. Passive means include emission control, camouflage, infrared shielding, warning receivers, and material design features. (FM 6-20) (USAFAS)

No.	*Scale*	*Measure*
01	Yes/No	Friendly aerial platforms accomplish mission without unacceptable losses to enemy air defense systems.
02	Time	To plan for the suppression of enemy air defense system.
03	Time	To respond to new requirements to suppress enemy air defense systems.
04	Time	To complete execution of all phases of the plan to suppress enemy air defenses.
05	Time	To prepare weapon systems and obtain the munitions used in the suppression of enemy air defense systems.
06	Percent	Of available combat power dedicated toward the suppression of enemy air defenses.
07	Percent	Of enemy air defense systems destroyed.
08	Percent	Of enemy air defense systems temporarily neutralized by nonlethal means.
09	Percent	Of friendly air sorties attacked by enemy air defense.
10	Percent	Of enemy air defense that required reattack.
11	Percent	Of friendly air losses due to enemy air defense.
12	Percent	Probability of hitting the targeted enemy air defense system.
13	Percent	Probability of killing the targeted enemy air defense system, given a hit.
14	Percent	Of friendly suppression of enemy air defense system missions that accomplished their destruction or suppression mission.
15	Number	And types of weapon systems and munitions used to suppress enemy air defenses.
16	Number	And types of enemy air defense systems that are permanently or temporarily suppressed.
17	Number	Of friendly casualties while conducting the suppression of enemy air defenses.
18	Number	Of instances of fratricide while attacking enemy air defense system targets.



ART 5.3.2 CONDUCT NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) DEFENSE

5-34. Defend against nuclear, biological, and chemical (NBC) weapons using the principles of avoidance, protection, and decontamination. ART 5.3.2 includes protection from agents deliberately or accidentally released. An example of an accidentally released agent is toxic chemicals leaking from factory storage containers due to collateral damage. (FM 3-100) (USACMLS)

No.	*Scale*	*Measure*
01	Yes/No	Unit can continue its mission when attacked by enemy NBC weapons.
02	Time	To conduct area/route reconnaissance to identify the limits of NBC weapons effects.
03	Time	To refine Annex J (NBC) to the operation order.
04	Time	To deploy and employ NBC monitoring equipment.
05	Time	To identify the NBC hazard.
06	Time	To detect the use of NBC weapons within the AO.
07	Time	To issue downwind hazard warnings of an NBC attack in the AO.
08	Time	To conduct area damage control after the use of NBC weapons.
09	Time	To recover unit operational capability after an NBC attack.
10	Time	To give and understand NBC contamination alarms and signals.
11	Time	To assume appropriate MOPP after warning of the use of NBC weapons in the AO.
12	Time	To reconstitute unit to designated level of combat power after exposure to the effects of NBC weapons.

No.	Scale	Measure
13	Time	To coordinate for additional NBC reconnaissance, monitoring, and decontamination assets.
14	Time	To administer chemoprophylaxis, immunizations, pretreatments, and barrier creams for protection against NBC warfare agents.
15	Percent	Of incidents of the use of NBC weapons detected.
16	Percent	Of enemy delivery systems for NBC weapons in AO identified, targeted, and destroyed.
17	Percent	Of NBC contaminated sites in the AO that have decontamination operations initiated or completed.
18	Percent	Of friendly units in the AO that have NBC monitoring, protective, and decontamination equipment.
19	Percent	Of mission-capable, on-hand NBC monitoring, protective, and decontamination equipment.
20	Percent	Of NBC monitoring, protective, and decontamination equipment positioned and operated correctly.
21	Percent	Of NBC hazards correctly identified.
22	Percent	Of friendly units in the AO without adequate supplies of individual and collective monitoring and protective equipment, and decontamination material.
23	Percent	Reduction in unit combat power from the need to defend against the use of NBC weapons.
24	Percent	Of friendly/civilian casualties in AO from the use of NBC weapons.
25	Number	Of instances where NBC weapons are employed.
26	Number	And types of on-hand NBC monitoring, protective, and decontamination equipment.
27	Number	And types of friendly systems destroyed, damaged, or rendered inoperable resulting from the use of NBC weapons.
28	Number	Of instances where units and facilities are affected by the employment of NBC weapons without prior warning of their use.
29	Number	Of false alarms relating to the employment of NBC weapons.

ART 5.3.2.1 PROVIDE NBC PROTECTION TO FRIENDLY FORCES

5-35. Employ detecting, identifying, marking, warning, and reporting methods and equipment to protect personnel, units, and equipment from nuclear, biological, or chemical hazards. (FM 3-4) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit can continue its mission when attacked by enemy NBC weapons.
02	Time	To conduct area reconnaissance to determine the limits of the effects of NBC weapon employment.
03	Time	To refine Annex J (NBC) to the operation order.
04	Time	To detect the use of NBC weapons within the AO.
05	Time	To issue downwind hazard warnings of an NBC attack in the AO.
06	Time	To conduct area damage control after the use of NBC weapons.
07	Time	To recover unit operational capability after an NBC attack.

No.	Scale	Measure
08	Time	To assume appropriate MOPP after warning of use of NBC weapons in the AO.
09	Percent	Of enemy delivery systems for NBC weapons in AO identified, targeted, and destroyed.
10	Percent	Of NBC contaminated sites in the AO that have decontamination operations initiated or completed.
11	Percent	Of units in the AO that have NBC monitoring equipment.
12	Percent	Of mission-capable, on-hand NBC monitoring equipment.
13	Percent	Of NBC monitoring equipment positioned and operated correctly.
14	Percent	Of friendly units in the AO without adequate supplies of individual and collective protective equipment and decontamination material.
15	Percent	Of friendly/civilian casualties in AO as a result of the use of NBC weapons.
16	Number	And types of friendly systems destroyed, damaged, or rendered inoperable as a result of the use of NBC weapons.

ART 5.3.2.1.1 Employ Contamination Avoidance

5-36. Take measures to avoid or minimize the effects of NBC attacks and reduce the effects of NBC hazards. By taking measures to avoid the effects of NBC attacks, units can reduce their protective posture and decrease the likelihood and extent of decontamination required. (FM 3-3) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit can continue its mission when attacked by enemy NBC weapons.
02	Time	To detect the use of NBC weapons within the AO.
03	Time	To conduct route reconnaissance to determine locations where the effect of NBC weapons are present and the degree of contamination along selected routes.
04	Time	To conduct area reconnaissance to determine the limits of the effects of NBC weapons.
05	Time	To refine the operation order to avoid/limit contact with contaminated areas.
06	Time	To use the NBC warning and reporting system to send reports of NBC attacks, such as to issue downwind hazard warnings.
07	Time	To employ NBC monitoring equipment.
08	Time	To identify NBC hazards.
09	Time	To mark likely entry points into contaminated areas.
10	Time	To conduct contamination control—bypassing, exposing only the absolute minimum number of personnel and equipment, encapsulating personnel and equipment, covering equipment and supplies, and relocation.
11	Percent	Of NBC contamination in the AO detected and correctly identified.
12	Percent	Of friendly units in the AO that have NBC monitoring equipment.
13	Percent	Of mission-capable, on-hand NBC monitoring equipment.
14	Percent	Of NBC monitoring equipment positioned and operated correctly.

No.	Scale	Measure
15	Percent	Of unit courses of action modified due to the presence of NBC contamination.
16	Number	And types of on-hand NBC monitoring equipment.
17	Number	And types of friendly systems destroyed, damaged, or rendered inoperable resulting from contact with NBC contamination.
18	Number	Of friendly/civilian casualties in AO resulting from contact with NBC contamination.

ART 5.3.2.1.2 Identify Nuclear, Biological, and Chemical Hazards

5-37. Obtain information about the NBC activities and resources of an enemy by visual observation or other detection methods. Detect and identify NBC hazards, to include finding gaps and detours around NBC-contaminated areas. NBC reconnaissance, which provides the information for identifying NBC hazards, is part of the overall intelligence collection effort. (See ART 1.3.3, Conduct Tactical Reconnaissance.) (FM 3-19) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission when attacked by enemy NBC weapons.
02	Time	To collect NBC hazard samples.
03	Time	To identify NBC hazard samples.
04	Time	Required to obtain medical specimens for suspected biological or chemical hazards.
05	Time	Required to identify NBC warfare agents from medical specimens.
06	Percent	Of instances in which an NBC hazard is correctly identified.
07	Percent	Of instances in which an NBC hazard is incorrectly identified as harmless.
08	Percent	Of instances in which a harmless sample is incorrectly identified as an NBC hazard.
09	Number	Of casualties due to incorrect identification of NBC hazards.

ART 5.3.2.1.3 Warn Personnel/Units of Contaminated Areas

5-38. Alert units and personnel concerning contaminated areas so they can retain freedom of maneuver, orient on the threat, report all information rapidly and accurately, and develop the situation rapidly. (FM 3-4) (USACMLS)

No.	Scale	Measure
01	Yes/No	Personnel/units warned of the presence and limits of contaminated areas within their area of operations so they can retain freedom of maneuver.
02	Time	To detect the use of NBC weapons within the AO.
03	Time	To conduct area reconnaissance to determine the limits of the effects of NBC weapons.
04	Time	To conduct route reconnaissance to determine locations where the effects of NBC weapons are and the degree of contamination.
05	Time	To refine operation order to avoid/limit contact with contaminated areas.
06	Time	To use the NBC warning and reporting system to send reports of NBC attacks, such as to issue downwind hazard warnings.

No.	Scale	Measure
07	Time	To employ NBC monitoring equipment.
08	Time	To identify NBC hazards.
09	Time	To mark likely entry points into contaminated areas.
10	Time	To give and understand NBC contamination alarms and signals.
11	Percent	Of NBC contamination in the AO detected and correctly identified.
12	Percent	Of friendly units in the AO that have NBC monitoring equipment.
13	Percent	Of mission-capable, on-hand NBC monitoring equipment.
14	Percent	Of NBC monitoring equipment positioned and operated correctly.
15	Percent	Of unit personnel trained to operate in an NBC environment.
16	Number	And types of on-hand NBC monitoring equipment.
17	Number	And types of friendly systems destroyed, damaged, or rendered inoperable due to unanticipated contact with NBC contamination.
18	Number	Of friendly/civilian casualties in the AO due to unanticipated contact with NBC contamination.

ART 5.3.2.1.4 Report NBC Hazards Throughout the Area of Operations

5-39. Provide NBC hazards information to support decision making and permit units and individuals to avoid contaminated areas. (FM 3-4) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit accomplishes its mission.
02	Time	To detect the use of NBC weapons within the AO.
03	Time	To conduct area reconnaissance to determine the locations that are contaminated and the degree of that contamination resulting from the employment of NBC weapons.
04	Time	To conduct route reconnaissance to determine the locations that are contaminated and the degree of that contamination resulting from the employment of NBC weapons.
05	Time	To refine the operation order to avoid /limit contact with contaminated areas.
06	Time	To use the NBC warning and reporting system to send reports of NBC attacks, such as to issue downwind hazard warnings.
07	Time	To identify NBC hazards.
08	Time	To give and understand NBC contamination alarms and signals.
09	Percent	Of NBC contamination in the AO detected, correctly identified, and reported.
10	Percent	Of friendly units in the AO that have information systems capable of receiving NBC warnings.
11	Percent	Of unit COAs that must be abandoned/changed/modified due to the warning of the presence of contaminated areas.
12	Number	And types of friendly systems destroyed, damaged, or rendered inoperable due to contact with NBC contamination.

No.	Scale	Measure
13	Number	Of friendly/civilian casualties in the AO due to contact with NBC contamination.

ART 5.3.2.1.5 Use Individual/Collective Nuclear, Biological, and Chemical Protective Equipment

5-40. Take action that allows soldiers to survive and continue the mission under NBC conditions. (FM 3-4) (USACMLS)

No.	Scale	Measure
01	Yes/No	The use of NBC protective equipment preserves unit personnel, equipment, and supplies, for future missions.
02	Time	To conduct area reconnaissance to detect the use of NBC weapons.
03	Time	To plan/revise the plan to employ protective equipment to take into account existing factors of METT-TC.
04	Time	To establish the degree of local security for installing collective NBC protective equipment.
05	Time	To employ additional NBC protective equipment to harden individuals and facilities from the effects of NBC weapons.
06	Time	To assume MOPP in response to the employment of NBC weapons given previous MOPP.
07	Time	To employ NBC protective equipment to harden supply stocks, with engineer support.
08	Time	To employ NBC protective equipment to harden supply stocks, without engineer support.
09	Time	To emplace warning signs marking the edges of areas contaminated by NBC weapons.
10	Time	To obtain the NBC protective equipment and systems needed to complete hardening process.
11	Percent	Of personnel, systems, and facilities hardened with NBC protective equipment and systems.
12	Percent	Of personnel trained to use NBC protective equipment.
13	Percent	Of on-hand NBC protective equipment and supplies.
14	Percent	Of NBC individual and collective protective equipment employed to standard.
15	Percent	Of mission-capable NBC individual and collective protective equipment systems.
16	Percent	Of friendly casualties due to improperly used NBC protective equipment.
17	Percent	Of casualties or equipment and supplies lost to enemy attack due to the nonavailability of NBC protective equipment.
18	Number	Of mission-capable individual and collective NBC protective equipment systems.
19	Number	Of friendly casualties due to improperly used NBC protective equipment or slow reaction to the use of NBC weapons.
20	Number	Of casualties or equipment and supplies lost due to the nonavailability of NBC protective equipment.

ART 5.3.2.1.6 Prepare for a Nuclear Strike

5-41. Take preparatory actions to warn personnel, harden positions, protect equipment, and conduct periodic monitoring when warned that a nuclear strike is imminent. (FM 3-3) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission after the nuclear strike.
02	Time	To prepare for the nuclear strike. This includes the time it takes to cover and secure loose, flammable, and explosive items, zero radiation-monitoring equipment, close sights and optics, shut down information systems and disconnect power and antenna leads, and take protective measures to prevent dazzle. The time will also vary with the need to take additional preparatory measures, depending on the unit/installation/ facility's closeness to the predicted detonation point.
03	Time	To move the unit/system to the minimum safe distance (MSD) from the predicted ground zero.
04	Time	To prepare and transmit effective downwind messages (USMTF #C503).
05	Time	To transmit, receive, and understand a nuclear strike warning (STRIKWARN, USMTF #C505).
06	Time	To conduct reconnaissance and surveillance to detect a nuclear strike and determine ground zero.
07	Percent	Of unit casualties due to the effects—blast, thermal radiation, residual radiation, and electromagnetic pulse—of a nuclear strike.
08	Percent	Of nuclear strike preparatory measures completed before a nuclear strike.
09	Percent	Of unit caught within MSD 1, MSD 2, and MSD 3 of ground zero.
10	Percent	Of systems redundancy existing before a nuclear strike.
11	Percent	Of systems in the unit designed to survive the thermal, radiation, and electromagnetic effects of a nuclear strike.
12	Percent	Of unit personnel and equipment not prepared for the nuclear strike.
13	Percent	Reduction in unit combat power due to the need to prepare for a nuclear strike.
14	Percent	Of unit personnel trained to prepare for a nuclear strike.
15	Number	And types of systems inoperable due to the effects of the nuclear strike.
16	Number	Of casualties due to the effects of the nuclear strike.
17	Number	Of casualties due to improperly used NBC protective equipment.
18	Number	Of casualties or equipment and supplies lost due to the nonavailability of NBC protective equipment.
19	Number	Of casualties attributed to slow reaction to the effects of the nuclear strike.

ART 5.3.2.2 DECONTAMINATE PERSONNEL AND SYSTEMS

5-42. Make any person (US military, coalition military, civilians, and enemy prisoners of war), object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing nuclear, biological, or chemical material/agents clinging to or around it. (FM 3-5) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission after decontaminating its personnel and systems.
02	Time	That execution of the unit scheme of maneuver delayed by decontamination procedures.
03	Time	To determine an appropriate decontamination site.
04	Time	To determine the extent of contamination.
05	Time	To move the required decontamination equipment to the decontamination site and obtain the necessary decontamination supplies.
06	Time	To decontaminate individuals.
07	Time	To decontaminate vehicles and systems.
08	Percent	Of unit personnel and equipment requiring decontamination.
09	Percent	Of unit personnel proficient in conducting decontamination operations.
10	Percent	Of on-hand decontamination equipment and supplies.
11	Percent	Of mission-capable, on-hand decontamination equipment.
12	Number	Of personnel and equipment requiring decontamination.
13	Number	And types of mission-capable, on-hand decontamination equipment.
14	Number	Of casualties due to improper/incomplete decontamination.

ART 5.3.2.2.1 Perform Immediate Decontamination

5-43. Minimize casualties, save lives, and limit the spread of contamination by contaminated individuals. Individuals or crews conduct immediate decontamination by skin decontamination, personal wipe down, and operator's spray down to stop agent from penetrating into the equipment. (FM 3-5) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission after conducting immediate decontamination.
02	Time	To complete skin decontamination.
03	Time	To conduct personal equipment wipe down.
04	Time	For equipment spray down.
05	Time	For unit personnel to exchange MOPP gear.
06	Time	To conduct unmasking procedures.
07	Time	To discard contaminated articles.
08	Percent	Of unit personnel and equipment requiring immediate decontamination.
09	Percent	Of unit personnel proficient in conducting immediate decontamination operations.
10	Percent	Of on-hand immediate decontamination equipment and supplies.
11	Percent	Of mission-capable, on-hand immediate decontamination equipment.
12	Number	Of personnel and equipment requiring immediate decontamination.
13	Number	And types of mission-capable, on-hand immediate decontamination equipment and supplies.
14	Number	Of casualties due to improper/incomplete immediate decontamination.

ART 5.3.2.2.2 Perform Operational Decontamination

5-44. Sustain operations, reduce the contact hazard, and limit the spread of contamination to eliminate the necessity for, or reduce the duration of, wearing MOPP gear. Affected units and battalion, crew, or chemical corps decontamination platoons perform operational decontamination. (FM 3-5) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission after conducting operational decontamination.
02	Time	To find a site to perform operational decontamination.
03	Time	To initiate operational decontamination after exposure.
04	Time	To obtain equipment and supplies to conduct operational decontamination.
05	Time	To complete operational decontamination of unit equipment.
06	Time	For unit personnel to exchange MOPP gear.
07	Time	To conduct unmasking procedures.
08	Time	To discard contaminated articles.
09	Percent	Of unit equipment requiring operational decontamination.
10	Percent	Of unit personnel proficient in conducting operational decontamination operations.
11	Percent	Of on-hand operational decontamination equipment and supplies.
12	Percent	Of mission-capable, on-hand operational decontamination equipment.
13	Percent	Of operations degraded, delayed, or modified due to the inability to perform operational decontamination.
14	Number	And types of equipment requiring operational decontamination.
15	Number	And types of mission-capable, on-hand operational decontamination equipment and supplies.
16	Number	Of casualties due to improper/incomplete operational decontamination.

ART 5.3.2.2.3 Perform Thorough Decontamination

5-45. Reduce contamination on personnel, equipment/materiel, and/or working areas to the lowest possible level (negligible risk) to permit the reduction or removal of individual protective equipment and to maintain operations with minimal degradation. There are three thorough decontamination techniques: detailed troop decontamination, detailed equipment decontamination, and detailed aircraft decontamination. To reduce or eliminate the need of individual protective clothing, units can carry out decontamination with assistance from chemical units. (FM 3-5) (USACMLS)

No.	Scale	Measure
01	Yes/No	Unit continues its mission after conducting a thorough decontamination.
02	Time	To find a site to perform thorough decontamination.
03	Time	To plan and coordinate a thorough decontamination operation, including the time to prioritize decontamination efforts.
04	Time	To obtain equipment and supplies to conduct a thorough decontamination.

No.	Scale	Measure
05	Time	To move to the decontamination site.
06	Time	To initiate a thorough decontamination.
07	Time	To complete thorough decontamination of unit equipment.
08	Time	For unit personnel to exchange MOPP gear.
09	Time	To conduct unmasking procedures.
10	Time	To discard contaminated articles.
11	Percent	Of unit equipment requiring thorough decontamination.
12	Percent	Of unit personnel proficient in conducting thorough decontamination operations.
13	Percent	Of personnel and equipment completing immediate decontamination before leaving the site of initial contamination.
14	Percent	Of on-hand necessary thorough decontamination equipment and supplies.
15	Percent	Of mission-capable, on-hand thorough decontamination equipment.
16	Percent	Of operations degraded, delayed, or modified due to the inability to perform thorough decontamination.
17	Number	And types of equipment requiring thorough decontamination.
18	Number	And types of mission-capable, on-hand thorough decontamination equipment and supplies.
19	Number	Of casualties due to improper/incomplete thorough decontamination.

ART 5.3.2.2.4 Perform Area Decontamination

5-46. Decontaminate fixed sites and terrain to restore the area to an acceptable level of readiness and effectiveness, while conducting the mission. Limit the spread and transfer of contamination, restore mission essential functioning, and open accessibility for entry and exit to key facilities. Fixed sites include command posts, signal facilities, supply installations and points, depots, pre-positioned materiel, airfields, and port facilities. (FM 3-5) (USACMLS)

No.	Scale	Measure
01	Yes/No	Units and unprotected personnel maneuver through or use the decontaminated area without hindrance from contamination after area decontamination procedures are completed.
02	Time	To perform reconnaissance of the area designated for decontamination.
03	Time	To plan and coordinate the area decontamination, including the time to prioritize decontamination efforts.
04	Time	To obtain equipment and supplies to conduct area decontamination.
05	Time	To move to the decontamination area.
06	Time	To initiate the area decontamination after exposure to contaminates.
07	Time	To complete area decontamination of fixed sites and key terrain.
08	Time	To move contaminated soil and hazardous waste generated by the area decontamination to hazardous waste dumps.
09	Percent	Of fixed sites and key terrain requiring area decontamination.
10	Percent	Of unit personnel proficient in conducting area decontamination opns.

No.	Scale	Measure
11	Percent	Of on-hand area decontamination equipment and supplies.
12	Percent	Of mission-capable, on-hand area decontamination equipment.
13	Percent	Of operations degraded, delayed, or modified due to the inability to perform area decontamination of fixed sites and key terrain.
14	Number	Of fixed sites requiring area decontamination.
15	Number	And types of mission-capable, on-hand area decontamination equipment and supplies.
16	Number	Of casualties due to improper/incomplete area decontamination.

ART 5.3.2.2.5 Perform Patient Decontamination

5-47. Decontaminate patients who are unable to decontaminate themselves through the systematic removal of clothing and contaminants. A patient decontamination team consisting of nonmedical personnel from the supported unit performs patient decontamination. The patient decontamination team operates under the supervision of medical personnel to ensure the decontamination process causes no further injury to the patient. (FM 4-02.7) (USAMEDDC&S)

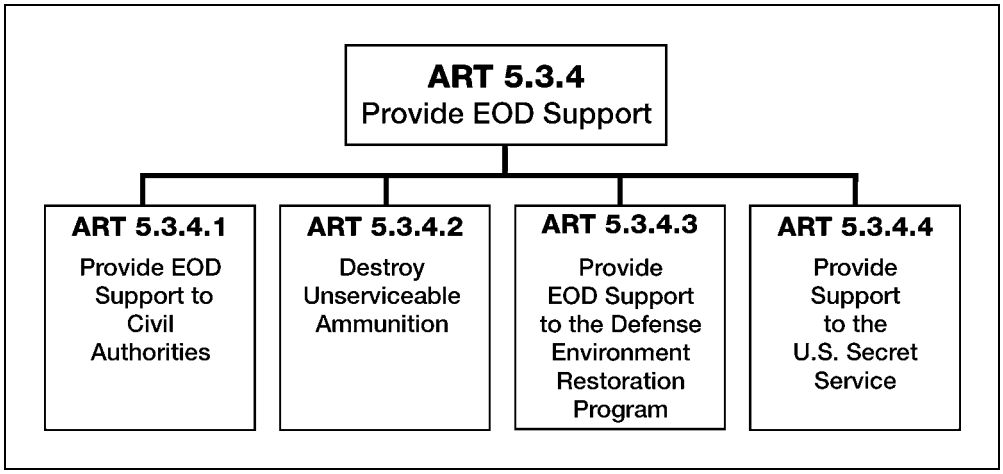
No.	Scale	Measure
01	Yes/No	Patient decontamination does not result in detrimental effects on the patient.
02	Time	To prepare patient NBC decontamination equipment and supplies.
03	Time	To decontaminate a litter patient. This includes decontaminating the patient's mask and hood; removing the field medical card, removing gross contamination; removing the patient's protective overgarment, uniform, and personal effects; transferring the patient to a decontamination litter; conducting spot skin decontamination; and transferring the patient through the shuffle pit to the clean treatment area.
04	Time	To decontaminate an ambulatory patient. This includes removing load bearing equipment, decontaminating the patient's mask and hood, removing the field medical card, removing all gross contamination, removing the patient's protective overgarment and personal effects, checking the patient for contamination, conducting spot skin decontamination, removing bandages and tourniquets (medical personnel perform this action), and moving the patient through the shuffle pit to the clean treatment area.
05	Time	To train the patient decontamination team.
06	Time	To establish clean and dirty patient treatment facilities.
07	Time	To obtain equipment and supplies needed to conduct patient decontamination.
08	Time	To initiate patient decontamination.
09	Time	To discard contaminated articles.
10	Percent	Of patients requiring decontamination before receiving medical treatment.
11	Percent	Of on-hand patient decontamination equipment and supplies.
12	Percent	Of mission-capable, on-hand patient decontamination equipment.

No.	Scale	Measure
13	Percent	Of medical treatments degraded, delayed, or modified due to the inability to perform patient decontamination.
14	Number	Of patients decontaminated.

ART 5.3.3 DISPERSE TACTICAL FORCES

5-48. Relocate forces and spread or separate troops, materiel, or activities following concentration and maneuver to enhance survivability. The lethality of modern weaponry significantly increases the threat to concentrated formations. Attacking commanders manipulate their own and the enemy's concentration of forces by a combination of dispersion, concentration, deception, and attack. Dispersion stretches the enemy's defenses and denies lucrative targets to enemy long-range fires. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit accomplishes assigned mission while tactically dispersed.
02	Time	To refine operations plan or order to reflect risk management assessment.
03	Time	To relocate friendly forces to minimize risks from battlefield hazards.
04	Percent	Of friendly casualties due to failure to disperse.
05	Percent	Of friendly casualties due to an inability to mass the effects of combat power because assets are too dispersed.



ART 5.3.4 PROVIDE EXPLOSIVE ORDNANCE DISPOSAL SUPPORT

5-49. Neutralize domestic or foreign conventional, nuclear, chemical, and biological munitions, and improvised devices that present a threat to military operations and military and civilian facilities, materiel, and personnel, regardless of location. The departments of Justice, State, and Energy may receive this support in accordance with current agreements and directives. ART 5.3.4 includes providing EOD support to the US Secret Service, Department of State, and the Department of Defense to protect the president and other designated persons. ART 5.3.4 also includes conducting bomb and

sabotage device recognition and safety precaution training. (FM 9-15) (USAOC&S)

No.	Scale	Measure
01	Yes/No	EOD support allows the unit to accomplish its mission.
02	Yes/No	Collateral damage incurred during the EOD operation is within acceptable limits.
03	Yes/No	Safeguard classified materials and publications during the EOD operation.
04	Yes/No	Forward items and components of technical intelligence value to appropriate headquarters/agency.
05	Time	To provide EOD input to Annex I (CSS) to the operation plan/order.
06	Time	To respond to a request for EOD support.
07	Time	Delay in executing the scheme of maneuver due to the presence of unexploded ordnance and improvised devices.
08	Time	To gather intelligence information (what, when, where, how delivered, and type) regarding munitions.
09	Time	To identify safety requirements and considerations.
10	Time	To identify personnel, equipment, procedures, and additional support requirements.
11	Time	To coordinate with reporting agency for site support assistance, such as engineer, medical, security, and transportation.
12	Time	To clear munitions and improvised devices.
13	Time	To document render safe procedures, as conducted, for unknown ordnance, if technical intelligence data does not exist.
14	Percent	Of safety precautions enforced during EOD operation.
15	Percent	Of reported munitions and improvised devices rendered harmless.
16	Percent	Of reported munitions and improvised devices cleared in accordance with commander's priorities.
17	Percent	Of available EOD support expended on conducting bomb and sabotage device recognition and safety training.
18	Percent	Of patients received at medical treatment facilities who have unexploded ordnance in the wound.
19	Number	Of casualties during the EOD operation.
20	Number	And types of ordnance located and destroyed by EOD personnel.
21	Number	Of NBC and conventional ordnance incidents responded to within a given period.

ART 5.3.4.1 PROVIDE EXPLOSIVE ORDNANCE DISPOSAL SUPPORT TO CIVIL AUTHORITIES

5-50. Provide assistance, to include training, to public safety and law enforcement agencies to deal with improvised explosive devices. Provide EOD service when requested by local, state, or federal authorities in the interest of public safety. ART 5.3.4.1 includes assisting law enforcement personnel with war souvenir collection campaigns and the disposition of the explosive ordnance collected. (FM 9-15) (USAOC&S)

No.	Scale	Measure
01	Yes/No	The EOD support accomplishes the intent of the requesting civil authorities.
02	Yes/No	Collateral damage during the EOD operation is within acceptable limits.
03	Yes/No	Safeguard classified materials and publications during the EOD operation.
04	Yes/No	Forward items and components of technical intelligence value to the appropriate headquarters/agency.
05	Time	To determine whether the EOD support requested by a civil authority is authorized under current laws and regulations.
06	Time	To move from the current location to the work site.
07	Time	To gather information about the munitions (what, when, where, how delivered, and type).
08	Time	To identify safety requirements and considerations.
09	Time	To identify personnel, equipment, procedures, and additional support requirements.
10	Time	To coordinate with the reporting agency for site support assistance, such as engineer, medical, security, and transportation.
11	Time	To clear munitions and improvised devices.
12	Time	To document render safe procedures, as conducted, for unknown ordnance, if technical intelligence data does not exist.
13	Time	Spent in developing and coordinating public awareness campaigns on the dangers that war souvenirs pose to the civilian population.
14	Percent	Of safety precautions enforced during the EOD operation.
15	Percent	Of reported munitions and improvised devices rendered harmless.
16	Percent	Of reported munitions and improvised devices cleared in accordance with the requesting agency's priorities.
17	Percent	Of available EOD support expended on public safety training, including mine recognition training.
18	Number	Of casualties during the EOD operation.
19	Number	And types of ordnance located and destroyed by EOD personnel.
20	Number	Of requests for assistance from civil authorities responded to within a given period.

ART 5.3.4.2 DESTROY UNSERVICEABLE AMMUNITION

5-51. Supervise or assist in the routine destruction of unserviceable/surplus ammunition, upon the request of an accountable agency. (FM 9-15) (USAOC&S)

No.	Scale	Measure
01	Yes/No	EOD support accomplishes the intent of the requesting agency.
02	Yes/No	Collateral damage incurred during the conduct of the EOD operation is in acceptable limits.
03	Yes/No	Safeguard classified materials and publications during EOD operation.
04	Time	To identify safety requirements and considerations that concern destruction of the unserviceable/surplus ordnance.

No.	Scale	Measure
05	Time	To identify personnel, equipment, procedures, and additional support requirements.
06	Time	To move from the current location to the work site.
07	Time	To coordinate with the reporting agency for site support assistance, in areas such as engineer, medical, security, and transportation.
08	Time	To destroy the unserviceable/surplus ordnance.
09	Percent	Of safety precautions enforced during the EOD operation.
10	Percent	Of nominated ordnance destroyed or rendered harmless.
11	Percent	Of nominated ordnance destroyed/rendered inert in accordance with the requesting agencies priorities.
12	Number	Of casualties during the conduct of the EOD operation.
13	Number	And types of ordnance destroyed by EOD personnel.

ART 5.3.4.3 PROVIDE EXPLOSIVE ORDNANCE DISPOSAL SUPPORT TO THE DEFENSE ENVIRONMENT RESTORATION PROGRAM

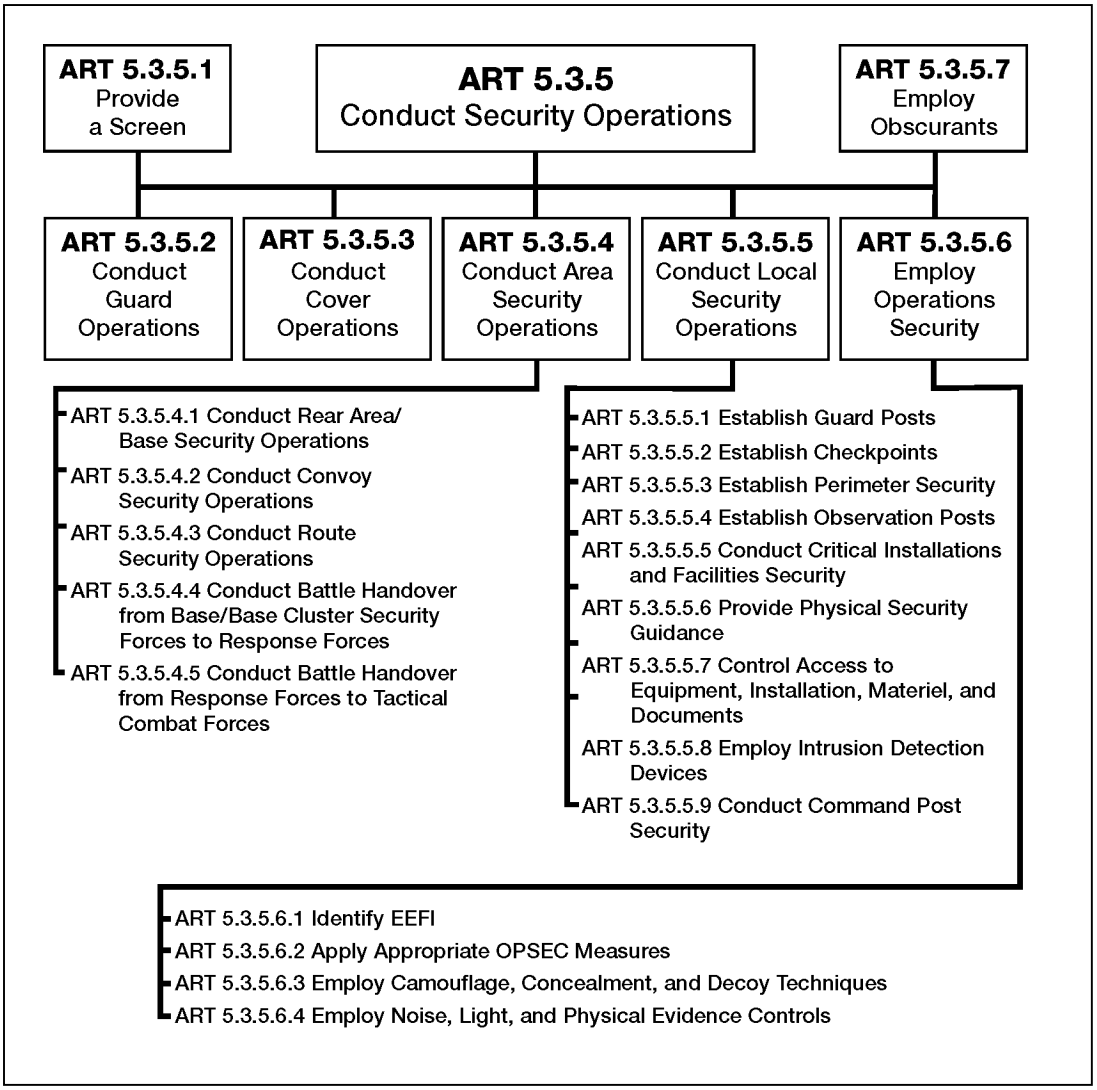
5-52. Provide EOD support to agencies restoring the environment at military installations. (FM 9-15) (USAOC&S)

No.	Scale	Measure
01	Yes/No	EOD support accomplishes the intent of the requesting authorities.
02	Yes/No	Collateral damage incurred during the conduct of the EOD operation is in acceptable limits.
03	Yes/No	Safeguard classified materials and publications during EOD operation.
04	Yes/No	Forward items and components of technical intelligence value to appropriate headquarters/agency.
05	Time	To move from the current location to the work site.
06	Time	To identify safety requirements and considerations that concern the ordnance found during environment restoration projects.
07	Time	To identify personnel, equipment, procedures, and additional support requirements.
08	Time	To clear ordnance from the environmental restoration project site.
09	Time	To coordinate with the reporting agency for site support assistance, such as engineer, medical, security, and transportation.
10	Time	To document render safe procedures, as conducted, for unknown ordnance, if technical intelligence data does not exist.
11	Percent	Of safety precautions enforced during the EOD operation.
12	Percent	Of reported munitions rendered harmless.
13	Percent	Of reported munitions cleared in accordance with the requesting agency's priorities.
14	Number	Of casualties during the conduct of the EOD operation.
15	Number	And types of ordnance located and destroyed by EOD personnel.
16	Number	Of requests for assistance responded to in a given period.

ART 5.3.4.4 PROVIDE SUPPORT TO THE SECRET SERVICE

5-53. Provide support to the U. S. Secret Service, the Department of State, and the Department of Defense for the protection of the president and other designated high-risk personnel. (FM 9-15) (USAOC&S)

No.	Scale	Measure
01	Yes/No	EOD support accomplishes the intent of protecting the executive from death or injury from ordnance and improvised explosive devices.
02	Yes/No	Collateral damage incurred during the conduct of the EOD operation is in acceptable limits.
03	Yes/No	Safeguard classified materials and publications during EOD operation.
04	Yes/No	Forward items and components of technical intelligence value to appropriate headquarters/agency.
05	Time	To determine if current laws and regulations authorize the provision of the requested EOD support.
06	Time	To move from current location to work site.
07	Time	To gather intelligence information (what, when, where, how delivered, and type) regarding munitions and improvised explosive devices.
08	Time	To identify safety requirements and considerations.
09	Time	To identify personnel, equipment, procedures, and additional support requirements.
10	Time	To coordinate with reporting and other agencies for additional site support assistance, such as engineer, medical, security, and transportation.
11	Time	To clear munitions and improvised explosive devices.
12	Time	To document render safe procedures, as conducted, for unknown ordnance, if technical intelligence data does not exist.
13	Time	Spent in training personnel providing executive protection services on recognizing and conducting immediate action drills when confronted by conventional or improvised explosive devices.
14	Percent	Of safety precautions enforced during EOD operation.
15	Percent	Of reported munitions and improvised explosive devices rendered harmless.
16	Percent	Of reported munitions and improvised explosive devices cleared in accordance with the requesting agencies priorities.
17	Percent	Of available EOD support expended on training executive protection services personnel.
18	Percent	Of available EOD support expended on assisting the Secret Service and other governmental agencies that provide executive protection services.
19	Number	Of casualties during the conduct of the EOD operation.
20	Number	And types of ordnance located and destroyed by EOD personnel.
21	Number	Of requests for assistance from civil authorities responded to within a given period.



ART 5.3.5 CONDUCT SECURITY OPERATIONS

5-54. Security operations are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected forces. Commanders continually conduct some form of security operations. (FM 3-90) (USACAC)

Note: The information obtained on the enemy in conducting this task also pertains to ART 1.0 (Intelligence Battlefield Operating System).

No.	Scale	Measure
01	Yes/No	The operations of the security force provide the protected force/installation with sufficient reaction time and maneuver space to conduct defensive operations.
02	Yes/No	Security force in place not later than time specified in operation order.
03	Yes/No	Security force prevents enemy ground observation of protected force/installation.
04	Yes/No	Collateral damage from security operation within acceptable limits.
05	Yes/No	Security force provides early and accurate warning of enemy approach.
06	Yes/No	The security force orients its operations of the force or facility to be secured.
07	Yes/No	The security force performs continuous reconnaissance.
08	Yes/No	The security force maintains contact with enemy forces.
09	Yes/No	The commander develops criteria for ending the security operation.
10	Time	To conduct reconnaissance of the area surrounding the secured force/installation.
11	Time	To plan security operation.
12	Time	To prepare for the security operation including movement into security area.
13	Time	To execute the security operation.
14	Time	To report enemy activities to appropriate headquarters.
15	Time	That the secured force/installation has to prepare prior to its encounter with the enemy.
16	Time	To integrate host/third nation security forces and means into friendly security operations.
17	Percent	Of security force casualties during the security operation.
18	Percent	Of secured force/installation casualties during the security operation.
19	Percent	Of unit combat power used to provide desired degree of security.
20	Percent	Decrease in the support capability of combat support and combat service support units due to the requirement to provide security forces from internal assets.
21	Percent	Increase in availability of combat forces through use of host/third nation security forces.
22	Percent	Of enemy reconnaissance elements within security force capabilities destroyed or repelled.
23	Percent	Of friendly operations judged as not compromised prior to or during execution.
24	Percent	Of operations not compromised (based on enemy prisoner of war (EPW) interrogations or captured documents).
25	Percent	Of critical facilities hardened or protected by security forces.
26	Percent	Of the AO/security area that can be observed by visual observation or covered by sensors at any given time.
27	Number	Of incidents where enemy forces affect the security of friendly units and facilities.

No.	Scale	Measure
28	Number	Of incidents where enemy reconnaissance forces compromise friendly course of action causing them to be delayed, disrupted, canceled, or modified.
29	Number	Of security force casualties during the security operation.
30	Number	Of secured force/installation casualties during the security operation.
31	Number	Of mobility corridors/avenues of approach that can be observed by the security force.
32	Number	Of observation posts that can be established by the security force.
33	Number	Of enemy reconnaissance elements destroyed during security operation.
34	Square km	Size of security area/AO.

ART 5.3.5.1 PROVIDE A SCREEN

5-55. A screen is a security operation that primarily provides early warning to the protected force. The unit executing a screen observes, identifies, and reports enemy actions. Generally, a screening force, augmented by indirect fires, engages and destroys enemy reconnaissance elements within its capabilities, but otherwise fights only in self-defense. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The screening force's operations provide the protected force/installation with sufficient reaction time and maneuver space to conduct defensive operations.
02	Yes/No	Screening force in place not later than time specified in operation order.
03	Yes/No	Screening force prevents enemy ground observation of protected force/installation.
04	Yes/No	Collateral damage from the screening force's activities are within acceptable limits.
05	Yes/No	Screening force provides early and accurate warning of enemy approach.
06	Yes/No	The screening force orients its operations of the force or facility to be secured.
07	Yes/No	The screening force performs continuous reconnaissance.
08	Yes/No	The screening force maintains contact with enemy forces.
09	Yes/No	The commander develops criteria for ending the screening operation.
10	Time	To conduct reconnaissance of the area surrounding the secured force/installation.
11	Time	To plan the screen.
12	Time	To prepare for the screen including movement into security area.
13	Time	To execute the screen.
14	Time	To report enemy activities to appropriate headquarters.
15	Time	Amount of warning that the screening force gives to the secured unit/installation before the secured unit/installation makes contact with the enemy.
16	Percent	Of screening force casualties during the screen.

No.	Scale	Measure
17	Percent	Of secured force/installation casualties during the conduct of the screen.
18	Percent	Of unit combat power used to provide a screen.
19	Percent	Of enemy reconnaissance elements destroyed or repelled by the screening force.
20	Percent	Of friendly operations judged as not compromised prior to or during execution.
21	Percent	Of operations not compromised (based on EPW interrogations or captured documents).
22	Percent	Of the AO/security area that can be observed by the screen force using a combination of visual observation and sensors at any given time.
23	Number	Of incidents where enemy forces affect the security of friendly units and facilities.
24	Number	Of incidents where enemy reconnaissance forces compromise friendly course of action causing them to be delayed, disrupted, canceled, or modified.
25	Number	Of screening force casualties during the security operation.
26	Number	Of secured force/installation casualties during the conduct of the security operation.
27	Number	Of enemy reconnaissance elements destroyed during security operation.
28	Number	Of mobility corridors/avenues of approach that can be observed by the screening force.
29	Number	Of observation posts that can be established by the screening force.
30	Square km	Size of security area/AO.

ART 5.3.5.2 CONDUCT GUARD OPERATIONS

5-56. Guard is a security operation. Its primary task is to protect the main body. It gains time by fighting. It also observes and reports information while preventing enemy ground observation of and direct fire against the main body. A guard differs from a screen in that a guard force contains sufficient combat power to defeat, repel, or fix the lead elements of an enemy ground force before it can engage the main body with direct fires. The guard force operates within the range of the main body's fire support weapons, deploying over a narrower front than a comparable-size screening force to permit concentrating combat power. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The guard force's operations provide the protected force/installation with sufficient reaction time and maneuver space to conduct defensive operations.
02	Yes/No	Guard force in place not later than time specified in operation order.
03	Yes/No	Guard force prevents enemy ground observation of protected force/installation.
04	Yes/No	Collateral damage from the guard force's activities are within acceptable limits.
05	Yes/No	Guard force provides early and accurate warning of enemy approach.

No.	Scale	Measure
06	Yes/No	The guard force orients its operations of the force or facility to be secured.
07	Yes/No	The guard force performs continuous reconnaissance.
08	Yes/No	The guard force maintains contact with enemy forces.
09	Yes/No	The commander develops criteria for ending the guard operation.
10	Yes/No	Guard force causes the enemy main body to deploy.
11	Yes/No	Guard force impedes and harasses the enemy within its capabilities while displacing.
12	Time	To conduct reconnaissance of the area surrounding the secured force/installation.
13	Time	To plan the guard operation.
14	Time	To prepare for the guard operation to include movement into security area.
15	Time	To execute the guard operation.
16	Time	To report enemy activities to appropriate headquarters.
17	Time	Amount of warning that the guard force gives to the secured unit/installation before the secured unit/installation makes contact with the enemy.
18	Percent	Of guard force casualties during the guard operation.
19	Percent	Of secured force/installation casualties during the guard operation.
20	Percent	Of unit combat power used to provide the guard force.
21	Percent	Of enemy reconnaissance elements destroyed or repelled by the guard force.
22	Percent	Of friendly operations judged as not compromised prior to or during execution.
23	Percent	Of operations not compromised (based on EPW interrogations or captured documents).
24	Percent	Of the AO/security area that can be observed by the guard force using a combination of visual observation and sensors at any given time.
25	Number	Of incidents where enemy forces affect the security of the secured force/facilities.
26	Number	Of incidents where enemy reconnaissance or advance guard forces compromise friendly courses of action.
27	Number	Of guard force casualties during the guard operation.
28	Number	Of secured force/installation casualties during the guard operation.
29	Number	Of enemy reconnaissance and advance guard elements destroyed during the guard operation.
30	Number	Of mobility corridors/avenues of approach that can be observed by the guard force.
31	Number	Of observation posts that can be established by the guard force.
32	Square km	Size of security area/AO.

ART 5.3.5.3 CONDUCT COVER OPERATIONS

5-57. Cover is a security operation. Its primary task is to protect the main body. It gains time by fighting. It also observes and reports information while preventing enemy ground observation of and direct fire against the main body. A covering force operates outside supporting range of the main body. It promotes early situational development as it deceives the enemy about the location of the main battle area while disrupting and destroying enemy forces. Cover operations provide the main body with the maximum early warning and reaction time. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The covering force's operations provide the protected force with sufficient reaction time and maneuver space.
02	Yes/No	Covering force in place not later than time specified in operation order.
03	Yes/No	Covering force prevents enemy ground observation of protected force/installation.
04	Yes/No	Collateral damage from the covering force's activities are within acceptable limits.
05	Yes/No	Covering force provides early and accurate warning of enemy approach.
06	Yes/No	The covering force orients its operations on the secured force.
07	Yes/No	The covering force performs continuous reconnaissance.
08	Yes/No	The covering force maintains contact with enemy forces.
09	Yes/No	The commander develops criteria for ending the covering operation.
10	Yes/No	Covering force causes the enemy main body to deploy.
11	Yes/No	Covering force defeats or repels enemy forces as directed by the higher commander.
12	Yes/No	During an offensive cover operation the covering force penetrates the enemy's security area and locates the enemy's main defensive positions.
13	Yes/No	During an offensive cover operation the covering force determines enemy strengths and dispositions and locates gaps or weak points within the enemy's defensive scheme.
14	Yes/No	During an offensive cover operation the covering force deceives the enemy into thinking the main body has been committed.
15	Yes/No	During an offensive cover operation the covering force fixes enemy forces in current positions to allow the main body to maneuver against them.
16	Yes/No	During a defensive cover operation the covering force avoids being bypassed by attacking enemy forces.
17	Time	To conduct zone reconnaissance of the area surrounding the secured force.
18	Time	To plan the cover operation.
19	Time	To prepare for the cover operation to include movement to security area.
20	Time	To execute the cover operation.
21	Time	To report enemy activities to appropriate headquarters.

No.	Scale	Measure
22	Time	Amount of warning that the covering force gives to the secured unit/installation before the secured unit/installation makes contact with the enemy.
23	Percent	Of covering force casualties during the cover operation.
24	Percent	Of secured force casualties during the cover operation.
25	Percent	Of unit combat power used to provide the covering force.
26	Percent	Of enemy reconnaissance, advance guard, and main body elements destroyed or repelled by the covering force.
27	Percent	Of friendly operations judged as not compromised prior to or during execution.
28	Percent	Of operations not compromised (based on EPW interrogations or captured documents).
29	Percent	Of the security area that can be observed by the covering force using a combination of visual observation and sensors at any given time.
30	Percent	Of AO cleared of enemy forces by an offensive covering force.
31	Percent	Of enemy forces in an AO bypassed by an offensive covering force.
32	Number	Of incidents where enemy forces affect the security of the secured force.
33	Number	Of incidents where enemy reconnaissance, advance guard, or first echelon forces compromise friendly courses of action.
34	Number	Of covering force casualties during the cover operation.
35	Number	Of secured force casualties during the cover operation.
36	Number	Of enemy reconnaissance, advance guard, and main body first echelon elements destroyed during security operation.
37	Number	Of mobility corridors/avenues of approach that can be observed by the covering force.
38	Number	Of observation posts that can be established by the covering force.
39	Square km	Size of security area/AO.

ART 5.3.5.4 CONDUCT AREA SECURITY OPERATIONS

5-58. Area security is a security operation conducted to protect friendly forces, installations, routes, and actions within a specific area. Area security operations may be offensive or defensive in nature. They focus on the protected force, installation, route, or area. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The operations of the area security force provide the protected force/installation with sufficient reaction time and maneuver space.
02	Yes/No	Area security forces in place not later than time specified in operation order.
03	Yes/No	Area security force prevents enemy ground observation of protected force/ installation.
04	Yes/No	Collateral damage due to the conduct of area security operations within acceptable limits.

No.	Scale	Measure
05	Yes/No	Area security force provides early and accurate warning of enemy approach.
06	Yes/No	The area security force orients its operations on the protected forces and facilities.
07	Yes/No	The area security force performs continuous reconnaissance.
08	Yes/No	The area security force maintains contact with enemy forces.
09	Yes/No	The commander develops criteria for ending the area security operation.
10	Yes/No	The area commander establishes useful intelligence links with local authorities.
11	Time	To conduct reconnaissance of the area.
12	Time	To plan area security operation.
13	Time	To prepare for the area security operation including the conduct of troop movement.
14	Time	To execute the area security operation.
15	Time	To report enemy activities to appropriate headquarters.
16	Time	Warning time before the secured force/installation/route encounters enemy forces.
17	Time	To integrate host/third nation security forces and means into friendly area security operations.
18	Time	Between observation or surveillance of named areas of interest within secured area.
19	Time	For a reaction force/tactical combat force to respond and reach an installation or facility under attack.
20	Time	Increase required to transit an area due to enemy attacks on transportation facilities and road networks.
21	Percent	Of security force casualties during the area security operation.
22	Percent	Of casualties(secured force/installation and people using secured routes) during the area security operation.
23	Percent	Of unit combat power needed to provide desired degree of security.
24	Percent	Decrease in the support capability of combat support and combat service support units due to enemy attacks.
25	Percent	Decrease in the support capability of combat support and combat service support units due to the requirement to provide security forces from internal assets.
26	Percent	Decrease in the transport capability of a line of communication or main supply route due to enemy attacks.
27	Percent	Increase in availability of area security forces through use of host/third nation security forces.
28	Percent	Of enemy reconnaissance and other forces destroyed or repelled by the area security force.
29	Percent	Of friendly operations judged as not compromised prior to or during execution.
30	Percent	Of operations not compromised (based on EPW interrogations or captured documents).

No.	Scale	Measure
31	Percent	Of critical facilities in the AO hardened or protected by area security forces.
32	Percent	Of security measures completed for a given facility within the secure area.
33	Percent	Of the secured area that can be observed by visual observation or covered by sensors at any given time.
34	Percent	Of lines of communications and main supply routes within the area secured.
35	Percent	Of available military police effort in area used to provide area security, such as command post guards and reaction forces.
36	Percent	Of information system networks that have multiple paths over which to transmit data.
37	Percent	Of attempted enemy attacks—including terrorist attacks—that penetrate area security.
38	Number	And types of maneuver forces used to provide area security.
39	Number	And types of enemy forces operating within the area being secured.
40	Number	Of incidents where enemy forces affect the security of friendly units and facilities, such as terrorist attacks, snipping, and isolated mortar/rocket attacks.
41	Number	Of incidents where enemy forces compromise friendly COAs/level II and level III attacks/terrorist attacks that penetrate into target area.
42	Number	Of casualties incurred by the security force during the conduct of the area security operation.
43	Number	Of casualties incurred by the secured force/installation during the conduct of the area security operation.
44	Number	Of mobility corridors/avenues of approach that can be observed by the area security force.
45	Number	Of observation/guard posts that can be established by the area security force.
46	Number	Of enemy reconnaissance and other forces destroyed during security operation.
47	Square km	Size of area being secured.

ART 5.3.5.4.1 Conduct Rear Area and Base Security Operations

5-59. Rear area and base security operations are a specialized area security operation. It protects friendly forces, installations, and actions in the rear area. It includes measures taken by military units, activities, and installations to protect themselves from acts designed to impair their effectiveness. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The operations of the security forces provide the protected force/installation with sufficient reaction time and maneuver space.
02	Yes/No	Rear area and base security forces in place not later than time specified in operation order.

No.	Scale	Measure
03	Yes/No	Rear area and base security forces prevent enemy ground observation of protected force/installation.
04	Yes/No	Collateral damage due to the conduct of rear area and base security operations is within acceptable limits.
05	Yes/No	Security force provides early and accurate warning of enemy approach toward base perimeter.
06	Yes/No	The security force orients its operations on the protected facilities.
07	Yes/No	The security force performs continuous reconnaissance.
08	Yes/No	The security force maintains contact with enemy forces.
09	Yes/No	The area commander has established useful intelligence links with local authorities.
10	Yes/No	Commander prioritizes rear area and base security efforts to protect his most critical resources.
11	Time	To conduct reconnaissance of the rear area.
12	Time	To plan rear area and base security operation.
13	Time	To prepare for the rear area and base security operation including the conduct of troop movement.
14	Time	To execute the rear area and base security operation.
15	Time	To report enemy activities to appropriate headquarters.
16	Time	Warning time before the secured force/installation/route encounters enemy forces.
17	Time	To integrate host/third nation security forces and means into friendly rear area and base security operations.
18	Time	Between observation or surveillance of named areas of interest within secured area.
19	Time	For a reaction force/tactical combat force to respond and reach an installation or facility under attack.
20	Percent	Of security forces casualties during the rear area and base security operations.
21	Percent	Of casualties (secured force/installation and people using secured routes) during the rear area and base security operations.
22	Percent	Of unit combat power to provide desired degree of rear area and base security.
23	Percent	Decrease in the support capability of combat support and combat service support units due to the requirement to provide security forces from internal assets.
24	Percent	Decrease in the support capability of combat support and combat service support units due to enemy attacks.
25	Percent	Decrease in the transport capability of a line of communication or main supply route due to enemy attacks.
26	Percent	Increase in availability of rear area and base security forces through use of host/third nation security forces.
27	Percent	Of enemy reconnaissance and other forces destroyed or repelled by the base security forces.

No.	Scale	Measure
28	Percent	Of friendly sustaining operations judged as not compromised prior to or during execution.
29	Percent	Of critical facilities in the AO hardened and protected by security forces.
30	Percent	Of security measures, such as perimeter fences, cleared fields of fire, and anti-intrusion detection devices completed for a given facility within the rear area.
31	Percent	Of the rear area that can be observed by visual observation or covered by sensors at any given time.
32	Percent	Of lines of communications and main supply routes secured within the rear area.
33	Percent	Of available military police effort in area used to provide rear area security, such as reaction forces.
34	Percent	Of attempted enemy attacks—including terrorist attacks—that penetrate a base's perimeter security.
35	Number	And types of maneuver forces used to provide rear area and base security.
36	Number	And types of enemy forces operating within the echelon rear area.
37	Number	Of incidents where enemy forces affect the security of friendly bases, such as terrorist attacks, snipping, and isolated mortar/rocket attacks.
38	Number	Of incidents where enemy forces compromise friendly courses of action/level II and level III attacks/terrorist attacks that penetrate into their target area.
39	Number	Of security force casualties during the rear area and base security operations.
40	Number	Of secured force/installation casualties during the rear area and base security operations.
41	Number	Of mobility corridors/avenues of approach that can be observed by the area security force.
42	Number	Of observation/guard posts/checkpoints that can be established by the rear area security force.
43	Number	Of enemy reconnaissance and other forces destroyed during the conduct of rear area security operations.
44	Square km	Size of the echelon's rear area.

ART 5.3.5.4.2 Conduct Convoy Security Operations

5-60. Convoy security operations protect convoys. Units conduct convoy security operations any time there are not enough friendly forces to continuously secure lines of communications in an AO and there is a danger of enemy ground action against the convoy. Convoy security operations are defensive in nature and orient on the protected force. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	The operations of the convoy security forces provide the protected convoy with sufficient reaction time and maneuver space to avoid contact with significant enemy forces.

No.	Scale	Measure
02	Yes/No	Convoy crosses start point and release point at the times indicated in the operation order.
03	Yes/No	Fratricide did not occur.
04	Yes/No	The convoy escort orients its operations on the movement of the protected convoy.
05	Yes/No	Collateral damage due to the convoy escort operations is within acceptable limits.
06	Yes/No	Convoy screening elements provide early and accurate warning of enemy forces located along the route used by the convoy or moving toward the convoy's route.
07	Time	To conduct coordination with escorted unit and conduct troop leading procedures.
08	Time	To obtain route information.
09	Time	To designate reconnaissance, screen, escort, reaction force elements and move these elements into position.
10	Time	To conduct convoy security operation.
11	Time	For reaction force elements to respond.
12	Percent	Of convoy element casualties.
13	Percent	Of convoy escort casualties.
14	Percent	Of convoys provided convoy escorts.
15	Percent	Of available combat power in area used to provide convoy escorts including reaction forces.
16	Percent	Decrease in the support capability of combat support and combat service support units due to the requirement to provide convoy escort forces from internal assets.
17	Percent	Increase in supply amounts transported along a line of communications or main supply route due to the presence of convoy escorts.
18	Number	And types of forces used to provide convoy escorts.
19	Number	And types of enemy forces operating within the echelon rear area.
20	Number	Of convoy escort casualties during the operation.
21	Number	Of obstacles encountered, bypassed, and breached during the conduct of convoy security operations.
22	Number	And types of enemy forces destroyed during the conduct of convoy security operations.
23	km	Length of the route traveled by the escorted convoy.

ART 5.3.5.4.3 Conduct Route Security Operations

5-61. Route (including highway, pipeline, rail, and water) security operations protect lines of communications and friendly forces moving along them. Units conduct route security missions to prevent enemy ground forces from moving into direct fire range of the protected route. Route security operations are defensive in nature and terrain-oriented. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Route security elements provide early and accurate warning of enemy forces located along the route or moving toward the secured route.

No.	Scale	Measure
02	Yes/No	Route security established not later than the time indicated in the operation order.
03	Yes/No	Fratricide does not occur.
04	Yes/No	The route security force orients its operations on the secured route.
05	Yes/No	Collateral damage due to providing route security is within acceptable limits.
06	Time	To plan route security operations.
07	Time	To prepare to conduct route security operations.
08	Time	To designate reconnaissance, screen, escort, reaction force elements and move these elements into position.
09	Time	That security force route provides route security.
10	Time	For reaction force elements to respond to incidents along the route.
11	Time	That the protected route is not available for use by friendly forces because of enemy activities.
12	Percent	Of enemy attacks that succeed in closing the protected route.
13	Percent	Of casualties incurred by elements using the protected route.
14	Percent	Of security force casualties.
15	Percent	Of lines of communication or main supply routes with AO secured.
16	Percent	Of available combat power used to provide route security including reaction forces.
17	Percent	Increase in amount of supplies successfully transported along a line of communication or main supply route due to the provision of route security.
18	Number	And types of forces used to provide route security.
19	Number	And types of enemy forces operating near the secured route.
20	Number	Of route security force casualties during the operation.
21	Number	Of obstacles encountered, bypassed, and breached during the conduct of route security operations.
22	Number	Of attacks that succeed in closing the protected route.
23	Number	And types of enemy forces destroyed during route security operations.
24	km	Distance of the route secured.

ART 5.3.5.4.4 Conduct Battle Handover From Base/Base Cluster Security Forces to Response Forces

5-62. Transfer responsibility for fighting an enemy from the base/base cluster commander to the commander of the response force. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Battle handover occurs before the enemy can penetrate base perimeter/base cluster security area.
02	Yes/No	Main bodies of units conducting battle handover are not surprised by the enemy.
03	Time	To prepare and exchange plans.

No.	Scale	Measure
04	Time	To provide supporting fires.
05	Time	To establish conditions allowing battle handover.
06	Time	Difference between when contact at contact point was planned and when actually made.
07	Percent	Of time that participating forces are in contact with each other.
08	Percent	Of previous plans still applicable at time of battle handover.
09	Percent	Of casualties incurred by either force due to fratricide.
10	Number	Of fratricide incidents.
11	Number	Of casualties due to fratricide.
12	km	Distance between planned and actual unit contact points where linkup occurs.

ART 5.3.5.4.5 Conduct Battle Handover From Response Forces to Tactical Combat Forces

5-63. Transfer responsibility for fighting an enemy from the commander of the response force to the commander of a tactical combat force. A tactical combat force is a combat unit, with appropriate combat support and combat service support assets, that is assigned the mission of defeating level III threats. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Battle handover occurs before the enemy can penetrate base perimeter/base cluster security area.
02	Yes/No	Main bodies of units conducting battle handover are not surprised by the enemy.
03	Time	To prepare and exchange plans.
04	Time	To provide supporting fires.
05	Time	To establish conditions allowing battle handover.
06	Time	Difference between when contact at contact point was planned and when actually made.
07	Percent	Of time that participating forces are in contact with each other.
08	Percent	Of previous plans still applicable at time of battle handover.
09	Percent	Of casualties incurred by either force due to fratricide.
10	Number	Of fratricide incidents.
11	Number	Of casualties due to fratricide.
12	km	Distance between planned and actual unit contact points where linkup occurs.

ART 5.3.5.5 CONDUCT LOCAL SECURITY OPERATIONS

5-64. Take measures to protect friendly forces from attack, surprise, observation, detection, interference, espionage, terrorism, and sabotage. ART 5.3.5.5 enhances the freedom of action of tactical units in an AO by identifying and reducing friendly vulnerability to hostile acts, influence, or surprise. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Effective local security exists in a 360-degree arc around the unit.
02	Yes/No	Commander adjusts unit levels of alert based on the factors of METT-TC.
03	Time	To plan local security operations.
04	Time	To prepare for the conduct of local security operations.
05	Time	That local security will be maintained.
06	Time	To establish observation and guard posts.
07	Time	To conduct patrols of the local area.
08	Time	To emplace camouflage.
09	Time	Between observation and surveillance of dead space within direct fire range of the unit's perimeter.
10	Time	For all unit personnel to occupy fighting and survivability positions on receipt of warning of enemy attack/order.
11	Time	To site and emplace protective obstacles, such as concertina wire and command detonated anti-personnel mines.
12	Time	To adjust local security measures in reaction to changes in environmental conditions, such as fog, rain, and nightfall.
13	Time	For unit reaction force to respond to enemy penetration of unit perimeter.
14	Time	To establish ambushes to provide local protection under limited visibility conditions.
15	Percent	Of unit observing stand-to time and procedures as outlined in unit SOPs.
16	Percent	Of unit observing movement control restrictions.
17	Percent	Of unit observing unit noise and light discipline protocols.
18	Percent	Of available ground sensors, night vision devices, and daylight sights in operating condition.
19	Percent	Of local area around the unit under continuous observation or surveillance.
20	Percent	Of unit to provide local security.
21	Percent	Decrease in combat support and combat service support unit functional capabilities due to the requirement for those units to provide their own local security.
22	Number	And types of ground sensors, night vision devices, and daylight sights in operating condition.
23	Number	Of observation and guard posts established.
24	Number	Of patrols operating at any given time.
25	Number	Of ambushes operating at any given time.
26	Number	Of instances of enemy reconnaissance and surveillance attempts disrupted by friendly local security activities.
27	Number	Of level I and terrorist attacks directed against the unit.

ART 5.3.5.5.1 Establish Guard Posts

5-65. Delineate the organization and functions of interior and exterior guards to include orders, countersigns, parole words, and responsibility of the

main guard; the duties of personnel; and methods of mounting the guard. (FM 22-6) (USAIS)

No.	Scale	Measure
01	Yes/No	Personnel manning guard posts take appropriate action in accordance with ROE and special orders to prevent unauthorized entry or exit from protected facility.
02	Yes/No	Guard posts hardened against terrorist/level I attack.
03	Yes/No	Personnel manning guard posts allow only authorized persons and vehicles access to the protected site.
04	Yes/No	Guard posts allow adequate observation of mobility corridors and access routes leading into and out of the protected site.
05	Yes/No	Guard posts communicate with guard house/base defense operations center/unit command post.
06	Yes/No	Method of mounting guard is in accordance with doctrine, regulations, and unit SOPs.
07	Time	To assess the site—identify threat and vulnerabilities, review existing security arrangements, coordinate with facility commander, and conduct reconnaissance of the area.
08	Time	To develop guard post orders.
09	Time	To establish communication with guard house/base defense operations center/unit command post.
10	Time	To establish barrier control measure using available materials.
11	Time	To implement access controls, such as access rosters, badge systems, and duress codes.
12	Time	To establish challenge and password system.
13	Time	To emplace perimeter control measures to include concertina wire, mines, trenches, barricades, and fences.
14	Time	To obtain additional resources to improve existing perimeter control measures.
15	Time	To pass personnel and vehicles through the guard post.
16	Percent	Of perimeter penetrations detected and reported.
17	Percent	Of mission-capable perimeter control measures.
18	Percent	Of unit personnel to man existing guard posts.
19	Percent	Of protected site perimeter covered by observation from existing guard posts.
20	Number	Of guard posts established.
21	Number	Of personnel to man existing guard posts.
22	Number	Of surface and subsurface (tunnels) perimeter penetrations taking place/attempted.

ART 5.3.5.5.2 Establish Checkpoints

5-66. Establish checkpoints to monitor and control movement, inspect cargo, enforce rules and regulations, and provide information. (FM 3-19.4) (USAMPS)

No.	Scale	Measure
01	Yes/No	Personnel manning checkpoints take appropriate action in accordance with ROE and special orders to control movement, inspect cargo, enforce rules and regulations.
02	Yes/No	Checkpoint hardened against terrorist/level I attack.
03	Yes/No	Personnel manning checkpoint allow only authorized persons and vehicles to pass through the checkpoint.
04	Yes/No	Checkpoints placed at unanticipated locations and located so the checkpoint cannot be seen more than a short distance away to prevent drivers from avoiding it.
05	Yes/No	Checkpoints communicate with response forces/base defense operations center/unit command post.
06	Yes/No	Method of operating checkpoint is in accordance with doctrine, regulations, status of forces agreements, and unit SOPs.
07	Yes/No	Male and female search teams are available.
08	Time	To assess the checkpoint site—identify threat and vulnerabilities, review existing security arrangements, coordinate with facility commander, and conduct reconnaissance of the area.
09	Time	To develop special instructions for checkpoints.
10	Time	To establish communication with response forces, base defense operations center, and unit command post.
11	Time	To emplace checkpoint control measures to include concertina wire, mines, trenches, barricades, and fences.
12	Time	To establish barriers around checkpoint using available materials.
13	Time	To obtain additional resources to improve existing perimeter control measures.
14	Time	To pass personnel and vehicles through the checkpoint.
15	Percent	Of contraband detected and reported.
16	Percent	Of mission-capable checkpoint control measures.
17	Percent	Of unit personnel to man existing checkpoint.
18	Percent	Of personnel and vehicles that initiate fires against the checkpoint killed, destroyed, or captured.
19	Percent	Of personnel are aware of the ROE and the limitations regarding search, arrest, and use of force.
20	Number	Of checkpoints established.
21	Number	Of personnel to man existing checkpoints.
22	Number	Of personnel/vehicles attempting to flee/breach the checkpoint.
23	Number	And types of contraband seized at checkpoints.

ART 5.3.5.5.3 Establish Perimeter Security

5-67. Employ defensive measures to protect a unit, facility, or location from attack, unauthorized access, theft, or sabotage. Measures may include physical barriers, clear zones, lighting, guards or sentries, reaction forces, intrusion detection devices, and defensive positions. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Effective perimeter security exists in a 360-degree arc around the unit.
02	Yes/No	Commander adjusts unit levels of alert based on the factors of METT-TC.
03	Yes/No	The perimeter takes advantage of the natural defensive characteristics of the terrain.
04	Yes/No	The unit controls the area surrounding the perimeter to a range beyond that of enemy mortars and rockets.
05	Yes/No	Unit uses smoke and deception during the conduct of perimeter security.
06	Time	To plan for perimeter security.
07	Time	To prepare for the conduct of perimeter security.
08	Time	That perimeter security will be maintained.
09	Time	To establish observation and guard posts.
10	Time	To conduct patrols of the local area.
11	Time	To emplace camouflage.
12	Time	Between observation and surveillance of dead space within direct fire range of the unit's perimeter.
13	Time	For all unit personnel to occupy fighting and survivability positions on receipt of warning of enemy attack/order.
14	Time	For unit reaction force to respond to enemy penetration of unit perimeter.
15	Time	To site and emplace protective obstacles, such as concertina wire and command detonated antipersonnel mines.
16	Time	To adjust local security measures in reaction to changes in environmental conditions, such as fog, rain, and nightfall.
17	Time	To establish ambushes to provide local protection under limited visibility conditions.
18	Time	To emplace security measures that are not protective obstacles, such as sally ports, guard towers, intrusion detector sensors, and exterior lights.
19	Percent	Of unit observing stand-to time and procedures as outlined in unit SOPs.
20	Percent	Of unit observing movement control restrictions.
21	Percent	Of unit observing unit noise and light discipline protocols.
22	Percent	Of available ground sensors, night vision devices, and daylight sights in operating condition.
23	Percent	Of area around the unit perimeter under continuous observation or surveillance.
24	Percent	Of unit to provide perimeter security.
25	Percent	Decrease in combat support and combat service support unit functional capabilities due to the requirement for those units to provide their own perimeter security.
26	Number	And types of ground sensors, night vision devices, and daylight sights in operating condition.
27	Number	Of observation and guard posts established.
28	Number	Of patrols operating at any given time.
29	Number	Of ambushes operating at any given time.

No.	Scale	Measure
30	Number	Of instances enemy reconnaissance and surveillance attempts disrupted by friendly security activities.
31	Number	Of level I and terrorist attacks directed against the unit perimeter.
32	Number	Of level II attacks directed against the unit perimeter.

ART 5.3.5.5.4 Establish Observation Posts

5-68. Establish and maintain observation posts to prevent surprise to a protected force or to ensure observation of a designated area. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Observation post position allows personnel to observe assigned area, such as likely enemy avenues of approach and named areas of interest.
02	Yes/No	Observation post personnel provide early warning in event of enemy activity.
03	Yes/No	Personnel manning observation post engage and destroy enemy reconnaissance elements within organic and available supporting capabilities.
04	Yes/No	Observation post operational not later than the time the operation order specifies.
05	Yes/No	Observation posts communicate with higher headquarters.
06	Yes/No	Minimum of two personnel in observation post. Observation duties rotate on a given schedule.
07	Time	To plan and prepare to establish the observation post.
08	Time	To move from current position to proposed site of the observation point.
09	Time	To assess the proposed site for the observation post and move it to a more suitable location as necessary.
10	Time	To establish communication with higher headquarters.
11	Time	To establish local security including the selection of fighting and hide positions for combat vehicles, preparation of range cards, emplacing chemical agent alarms, and installing camouflage, concertina wire and protective mines.
12	Time	To orient personnel manning observation posts to terrain and mission control graphics, such as target reference points and trigger points.
13	Percent	Of enemy/civilian activity detected and reported.
14	Percent	Of serviceable, on-hand equipment (such as map with control graphics, compass, communications equipment, and observation devices) to conduct observation mission.
15	Percent	Of unit personnel to man existing observation posts.
16	Percent	Of named AO covered by observation from existing observation posts.
17	Number	Of observation posts established.
18	Number	Of personnel to man existing observation posts.
19	Number	Of observation posts detected by enemy reconnaissance assets.

ART 5.3.5.5.5 Conduct Critical Installations and Facilities Security

5-69. Secure and protect installations and facilities from hostile action. (FM 3-90) (USACAC)

No.	Scale	Measure
01	Yes/No	Security force protects installation or facility from damage.
02	Time	To refine base/base cluster defense plan.
03	Time	For a higher headquarters to assess base and base cluster defense plans.
04	Time	For reaction forces and response forces to respond to enemy threats to critical installations or facilities.
05	Time	To review counterintelligence plans for major tactical units in the AO.
06	Percent	Of unit to secure critical installations and provide facility security.
07	Percent	Of successful level I, level II, and terrorist attacks in echelon rear area.
08	Percent	Decrease in friendly installations and facilities capabilities due to successful attacks.
09	Percent	Of critical installations and facilities hardened against attack.
10	Percent	Of friendly installations and unit having current counterterrorism or antiterrorism training programs in effect.
11	Percent	Of tactical units in AO that have counterintelligence plans in effect.
12	Number	Of level I, level II, and terrorist attacks attempted against critical installations and facilities in the unit rear area.
13	Number	Of friendly force actions that disrupt enemy intelligence collection efforts.
14	Number	Of instances of operations degraded, disrupted, delayed, or modified due to successful enemy penetration of critical installations and facilities.

ART 5.3.5.5.6 Provide Physical Security Guidance

5-70. Protect personnel, information, and critical resources in all locations and situations against a wide spectrum of threats through the development and implementation of effective security policies and procedures. This total system approach is based on the continuing analysis and employment of protective measures, to include physical barriers, clear zones, lighting, access and key control, intrusion detection devices, and defensive positions. (FM 3-19.30) (USAMPS)

No.	Scale	Measure
01	Yes/No	Unit/base/installation physical security program protects personnel, information, and critical resources from unauthorized access.
02	Time	To review and refine unit physical security SOPs in accordance with the factors of METT-TC.
03	Time	To refine physical security regulations for installations and major combat formation in an AO.
04	Time	To complete a threat analysis.
05	Time	To design, procure, emplace and activate protective measures, such as physical barriers, clear zones, exterior lighting, access and key control, intrusion detection devices, and defensive positions.

No.	Scale	Measure
06	Percent	Of units/bases/installations in the AO that have active integrated physical security programs.
07	Percent	Of guidance in unit and base physical security programs actually followed.
08	Percent	Decrease in crime rate.
09	Percent	Increase in reported crimes cleared.
10	Percent	Of perpetrators arrested or killed.
11	Percent	Decrease in serious crimes reported.
12	Percent	Decrease in the fear of crime by unit personnel.
13	Percent	Of planned physical barriers, clear zones, exterior lighting, access and key control, intrusion detection devices, and defensive positions operational.
14	Number	Of successful attempts to gain unauthorized access to friendly forces, installations, information, equipment, and supplies.

ART 5.3.5.5.7 Control Access to Equipment, Installations, Materiel, and Documents

5-71. Establish a system of complementary, overlapping security measures to control access to critical resources and information. Measures may include physical barriers, clear zones, lighting, access and key control, the use of security badges, intrusion detection devices, and defensive positions. (FM 3-19.30) (USAMPS)

No.	Scale	Measure
01	Yes/No	Unit/base/installation physical security program protects personnel, information, and critical resources from unauthorized access.
02	Time	To review and refine unit physical security SOPs in accordance with the factors of METT-TC.
03	Time	To refine physical security regulations for installations and major combat formation in an AO.
04	Time	To complete a threat analysis.
05	Time	To design, procure, emplace and activate protective measures, such as physical barriers, clear zones, exterior lighting, access and key control, intrusion detection devices, and defensive positions.
06	Percent	Of units/bases/installations in the AO that have active integrated physical security programs.
07	Percent	Of guidance in unit and base physical security programs actually followed.
08	Percent	Of planned physical barriers, clear zones, exterior lighting, access and key control, intrusion detection devices, and defensive positions operational.
09	Number	Of successful attempts to gain unauthorized access to friendly forces, installations, information, equipment, and supplies.

ART 5.3.5.5.8 Employ Intrusion Detection Devices

5-72. Conduct site surveys. Install and operate intrusion detection systems to protect Army installations, personnel, operations, and critical resources in both tactical and non-tactical situations. (FM 3-19.30) (USAMPS)

No.	Scale	Measure
01	Yes/No	Unit/base/installation intrusion detection devices detect protected sites from unauthorized access.
02	Yes/No	Intrusion detection device is an integrated system that encompasses interior and exterior sensors, close-circuit television systems for assessing alarm conditions, electronic entry-control systems, data-transmission media, and alarm reporting systems for monitoring, controlling, and displaying various alarm and system information.
03	Yes/No	The intrusion detection device deployed in and around barriers serves as a boundary demarcation and means to keep animals and people from causing nuisance alarms by inadvertently straying into controlled area.
04	Yes/No	Voice communication links (radio, intercom, and telephone) with the response force are located in the security center.
05	Time	To complete a threat analysis.
06	Time	To design, obtain, emplace and activate intrusion detection device.
07	Time	For response force to respond to report of activity by the intrusion detection device.
08	Percent	Of alerts by intrusion detection device that are incorrect.
09	Number	Of intrusions into protected site that the intrusion detection device does not detect.

ART 5.3.5.5.9 Conduct Command Post Security

5-73. Prevent C2 disruption due to enemy forces penetrating the perimeter around a command post or the rapid forced displacement of the command post due to the presence of enemy forces. Security of command posts at all levels is essential to the continuity and successful exercise of C2. Security is achieved through the employment of security forces, air defense, camouflage, traffic control, electronic countermeasures, and frequent displacements. (FM 3-19.4) (USAMPS)

No.	Scale	Measure
01	Yes/No	Command post secured without degradation of command post operations.
02	Yes/No	Traffic control points are near the intersection of main supply routes and access roads to the command post. They ensure traffic flows freely, congestion is avoided and they screen traffic entering access roads.
03	Yes/No	Provide personal security for the commander.
04	Yes/No	Establish dismount point near the command post entrance.
05	Yes/No	Enforce noise, light, and litter discipline.
06	Yes/No	Control entrance to command post by access rosters.
07	Yes/No	Security force communicates with headquarters commandant.
08	Time	To conduct reconnaissance of routes to the command post and areas around the command post.

No.	Scale	Measure
09	Time	To conduct troop leading procedures.
10	Time	To establish a screen line around the command post.
11	Time	To conduct patrols around the command post.
12	Time	To establish defensive positions, deploy camouflage and concealment systems, and protective obstacles around the command post.
13	Time	To establish a challenge and password/duress system.
14	Time	To establish communications with headquarters commandant.
15	Time	Between movements/command post displacements/jumps.
16	Percent	Of available forces to provide command post security.
17	Percent	Of personnel who become casualties due to a level I, level II, or terrorist attack on the command post.
18	Number	Of level I, level II, and terrorist attacks against the command post.
19	Number	Of friendly force actions that disrupt enemy intelligence collection efforts.

ART 5.3.5.6 EMPLOY OPERATIONS SECURITY (OPSEC)

5-74. Identify EEFI and subsequently analyze friendly actions attendant to military operations and other activities. ART 5.3.5.6 identifies actions that can be observed by adversary intelligence systems and determines indicators adversary intelligence systems might obtain that could be interpreted or pieced together to derive EEFI in time to be useful to adversaries. ART 5.3.5.6 also involves selecting and executing measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to adversary exploitation. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	OPSEC compromises degrade, delay or modify unit operation.
02	Time	To refine information operations annex to operation order.
03	Time	To complete OPSEC assessment in AO.
04	Time	To identify possible compromises of essential elements of friendly information (EEFI) in AO.
05	Time	To identify EEFI for an operation.
06	Percent	Increase or decrease in number of security violations on combat net radios in the AO within a given period.
07	Percent	Of enemy sensor coverage in AO known to friendly force.
08	Percent	Of successful enemy attempted penetration of friendly information systems.
09	Percent	Of information system administrators and operators who have current OPSEC training.
10	Percent	Of identified friendly vulnerabilities in AO exploited by enemy actions.
11	Percent	Of friendly troop movements conducted without the possibility of enemy overhead surveillance (satellite and manned and unmanned aerial reconnaissance platforms).
12	Percent	Of units/facilities/installations protected from enemy observation/surveillance.

No.	Scale	Measure
13	Percent	Of electronic communications in AO encrypted or secured.
14	Percent	Of message traffic in AO exploited by enemy.
15	Percent	Of friendly emitters in AO exploited by enemy.
16	Percent	Of EEFI items covered by two or more measures.
17	Percent	Of enemy capabilities not covered by OPSEC measures that are covered by other elements: such as, PSYOP, deception, and electronic warfare.
18	Percent	Of friendly plan determined from self-monitoring of EEFI.
19	Percent	Of OPSEC measures previously assessed unsatisfactory that have improved based on assessment.
20	Percent	Of OPSEC measures selected tied to vulnerability analysis.
21	Percent	Of OPEC planners who accommodate measures required to protect trusted agent planning (e.g., given access).
22	Percent	Of OPSEC planners who have access to compartmented planning efforts.
23	Percent	Of OPSEC planners who have input to and receive guidance and results from higher headquarters OPSEC plans and surveys.
24	Percent	Of OPSEC surveys reflected in OPSEC plans.
25	Percent	Of routine actions with timing or location changed at least weekly.
26	Percent	Of units equipped with anti-surveillance sensor and sensor jamming devices.
27	Percent	Of vulnerabilities tied to specific enemy capabilities by planners.
28	Number	And types of information needed by the commander to make decisions listed as EEFI.
29	Number	Of security violations on combat net radios in the AO.
30	Number	Of instances of friendly force operational patterns repeated within the AO.

ART 5.3.5.6.1 Identify Essential Elements of Friendly Information (EEFI)

5-75. Identify friendly vulnerabilities that are exploitable by enemies and potential adversaries. Include recommendations concerning countermeasures and corrective action. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Commander and staff identify friendly vulnerabilities that can be exploited by an enemy.
02	Time	To develop EEFI.
03	Time	To disseminate initial and subsequent EEFI requirements to subordinate elements of the force.
04	Time	Between updates of priority information requirements.
05	Time	To disseminate to all force elements and agencies information obtained due to the answering of EEFI.
06	Time	In advance of collection that EEFI are identified.
07	Time	Since most current information regarding EEFI was last collected.
08	Time	Turnaround time to process new EEFI data.

No.	Scale	Measure
09	Percent	Of friendly activities and resource expenditures accurately predicted by friendly reference materials, checklists, and other previously prepared documents and databases.
10	Percent	Of total EEFI identified only during execution.
11	Percent	Of EEFI collected in time to meet current operational needs.
12	Percent	Of EEFI included in collection plan.
13	Number	Of EEFI not identified during planning.

ART 5.3.5.6.2 Apply Appropriate Operations Security (OPSEC) Measures

5-76. Deny adversaries information about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with planning and conducting military operations. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit application of OPSEC measures prevents the enemy from detecting the correct indicators of friendly operations until it is too late for the enemy to react.
02	Yes/No	Units change patterns of operation on an irregular basis.
03	Time	To apply appropriate OPSEC measures.
04	Time	To brief unit information operations cell and unit plans cell on OPSEC requirements.
05	Time	To identify target sets and desired effect, by priority.
06	Percent	Of OPSEC surveys reflected in OPSEC plans.
07	Percent	Of routine actions with timing or location changed at least weekly.
08	Percent	Of favorable signal security (SIGSEC) assessments.
09	Number	Of public media disclosures.
10	Number	Of critical EEFI that must be concealed from the enemy.

ART 5.3.5.6.3 Employ Camouflage, Concealment, and Decoy Techniques

5-77. Protect friendly forces, personnel, materiel, equipment, and information system nodes from observation and surveillance through the use of natural or artificial material. Employ an imitation in any sense of a person, object, or phenomenon with the intentions of deceiving enemy surveillance devices or misleading enemy evaluation. (FM 20-3) (USAES)

No.	Scale	Measure
01	Yes/No	The unit's use of camouflage, concealment, and decoy techniques enhance unit survivability.
02	Time	To employ camouflage, concealment, and decoy techniques.
03	Time	To conduct a preliminary assessment of camouflage, concealment, and decoy effort in the AO.
04	Time	To obtain additional operational camouflage and decoy systems as required by the METT-TC.
05	Percent	Of unit concealed from enemy observation and sensor detection.

No.	Scale	Measure
06	Percent	Of unit personnel trained to correctly employ camouflage and concealment and to use decoys.
07	Percent	Of casualties due to improper use of camouflage and concealment and decoys.
08	Percent	Of on-hand camouflage and decoy systems that are serviceable against enemy observation and sensors.
09	Number	And types of on-hand, serviceable camouflage and decoy systems.

ART 5.3.5.6.4 Employ Noise, Light, Thermal, and Physical Evidence Controls

5-78. Reduce friendly indicators by controlling personnel and equipment sounds, light emissions, and physical evidence of occupying a position. (FM 21-75) (USAIS)

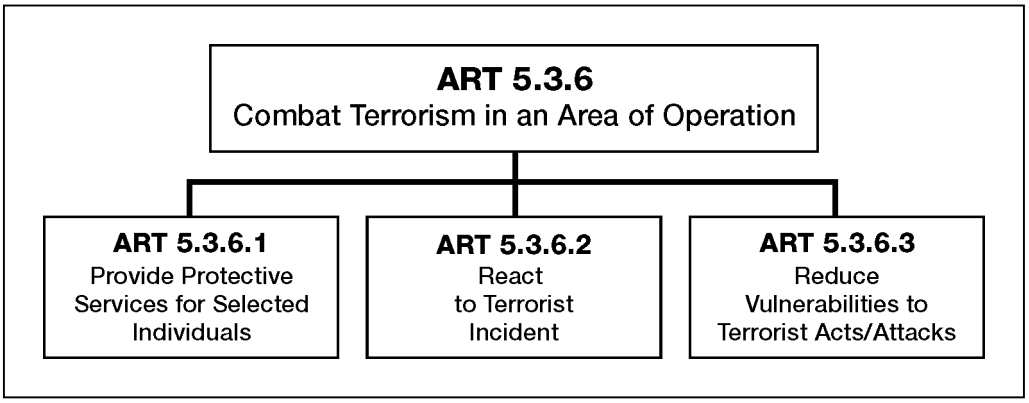
No.	Scale	Measure
01	Yes/No	Unit COA is not compromised by violations of noise, light, thermal, and physical evidence controls by unit personnel.
02	Time	To assess unit noise, light, thermal, and physical evidence controls.
03	Time	To employ noise, light, thermal, and physical evidence controls.
04	Percent	Increase in time to conduct operations required by the need to maintain noise, light, thermal, and physical evidence controls.
05	Percent	Of unit maintaining noise, light, thermal, and physical evidence controls.
06	Percent	Of unit personnel trained in noise, light, thermal, and physical evidence controls.
07	Percent	Of units/installations/facilities that have recorded violations of noise, light, thermal, and physical evidence controls.
08	Number	Of friendly casualties due to violations of unit noise, light, thermal, and physical evidence controls.

ART 5.3.5.7 EMPLOY OBSCURANTS

5-79. Use obscurants to conceal friendly positions and screen maneuvering forces from enemy observation. ART 5.3.5.7 includes obscuring/screening in the full spectrum of Army operations in the AO. (FM 3-50) (USACMLS)

No.	Scale	Measure
01	Yes/No	Use of obscurants improves the unit's survivability and maneuverability.
02	Yes/No	Use of obscurants compromises unit COA.
03	Time	To assess unit concealment requirements beyond that provided by camouflage systems.
04	Time	To employ obscurants to screen personnel, major combat equipment, bridge sites, and/or obstacles in AO.
05	Percent	Of unit commanders and planners able to effectively plan the use of obscurants to protect friendly personnel, unit equipment, and positions from enemy direct fire, observation and surveillance and for deception operations.
06	Percent	Of units/installations/facilities in the AO employing obscurants.

No.	Scale	Measure
07	Percent	Increase in time to conduct operations in limited visibility conditions due to the use of obscurants.



ART 5.3.6 COMBAT TERRORISM IN AN AREA OF OPERATIONS (AO)

5-80. Take actions to oppose terrorism throughout the entire AO. Actions include antiterrorism and counterterrorism measures. (FM 3-07) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit/installation continues its mission while taking actions to combat terrorism in the AO.
02	Yes/No	Unit/installation receives useable antiterrorism intelligence information from host-nation agencies.
03	Yes/No	Local population supports unit/installation presence in AO.
04	Yes/No	Effective response/reaction forces exist in the event of an attempted/successful terrorist penetration of unit/installation perimeter.
05	Yes/No	Unit/installation measures designed to combat terrorism—OPSEC—are not deliberately or accidentally disclosed to terrorist organizations.
06	Time	To refine installation/unit security plans/SOPs.
07	Time	For internal/external reaction and response forces to reach individual/installation/facility under attack.
08	Time	To identify critical facilities and key terrain and prioritize protection.
09	Time	To identify mission essential activities vulnerable to terrorist acts and inspect to determine if safeguards are adequate.
10	Percent	Of terrorist attacks that degrade, delay or modify friendly force operations.
11	Percent	Of units that have active counterterrorism protocols.
12	Percent	Of successful terrorist attacks.
13	Percent	Of friendly force and noncombatant casualties due to terrorist actions.
14	Percent	Of information systems in AO hardened against unauthorized access.
15	Percent	Of information systems in AO with multiple pathways over which to transmit data.

No.	Scale	Measure
16	Percent	Of critical installations and facilities hardened or protected against terrorist acts.
17	Percent	Reduction in unit mission capabilities/installation support capabilities due to security measures designed to combat terrorism in AO.
18	Percent	Reduction in line of communication/main supply route through capabilities due to security measures designed to combat terrorism in AO.
19	Number	And types of terrorists groups operating in unit AO or in the vicinity of friendly installations.
20	Number	Of counterterrorism activities unit supports in AO.
21	Number	Of terrorist attacks attempted in unit AO.
22	Number	Of successful terrorist attacks.
23	Number	Of friendly force actions to disrupt enemy terrorist activities.
24	Number	Of friendly force and noncombatant casualties due to terrorist actions.
25	Cost	To implement protective measures against terrorism in AO.

ART 5.3.6.1 PROVIDE PROTECTIVE SERVICES FOR SELECTED INDIVIDUALS

5-81. Protect designated high-risk individuals from assassination, kidnapping, injury, or embarrassment. ART 5.3.6.1 includes planning, preparing executing, and assessing close-in protection, coordinating external security with supporting law enforcement and security agencies, and providing technical advice on protective service operations to commanders, to include conducting vulnerability assessments. (FM 19-20) (USAMPS)

No.	Scale	Measure
01	Yes/No	Protected principal accomplishes mission while receiving protective services.
02	Yes/No	Protected principal was not injured/killed/captured during time in the unit/installation AO.
03	Yes/No	Forces providing protective services receive useable antiterrorism intelligence information from host-nation agencies.
04	Yes/No	Unit/installation OPSEC concerning measures taken to protect the principal are not deliberately or accidentally disclosed to terrorist organizations.
05	Yes/No	Local population supports principal's presence in AO.
06	Yes/No	Effective response/reaction forces exist in the event of an attempted/successful attack on the principal.
07	Time	To refine security plans to reflect changes in protected individual's itinerary.
08	Time	For internal/external reaction and response forces to respond to an attack on the protected individual.
09	Time	To identify facilities scheduled for visit by the protected individual, inspect to determine if safeguards are adequate, and prioritize protection.
10	Time	To identify activities by the protected individual that increase his vulnerability to terrorist acts.
11	Time	To collect critical personal data (medical history, likes and dislikes) on protected individual.

No.	Scale	Measure
12	Time	To conduct a threat assessment to include protected individual's history to determine previous threats targeted at him, threat level in AO, and conduct site visits.
13	Time	To determine and obtain any special equipment, such as military working dogs and devices for detecting the presence of unauthorized listening devices.
14	Percent	Of friendly force and noncombatant casualties due to terrorist actions directed against the principal.
15	Percent	Reduction in unit mission capabilities/installation support capabilities due to security measures designed to provide protection to the protected principal.
16	Number	And types of groups and enemy forces operating in unit AO or in the vicinity of friendly installations likely to attack the protected individual.
17	Number	And types of individuals and units needed to provide protective services in AO.
18	Number	And types of counterterrorism and anti-terrorism activities conducted to protect the principal in AO.
19	Number	Of terrorist attacks attempted against the protected individual in unit AO.
20	Number	Of friendly force and noncombatant casualties due to terrorist actions directed against the protected principal.
21	Cost	To provide protective services within AO.

ART 5.3.6.2 REACT TO A TERRORIST INCIDENT

5-82. Implement measures to treat casualties, minimize property damage, restore operations, and expedite the criminal investigation and collection of lessons learned from a terrorist incident. (FM 19-10) (USAMPS)

Note: ART 7.7.2.2.2 (Conduct Criminal Investigation) addresses the conduct of crime analysis. ART 7.2.1 (Collect Relevant Information) addresses the collection of lessons learned.

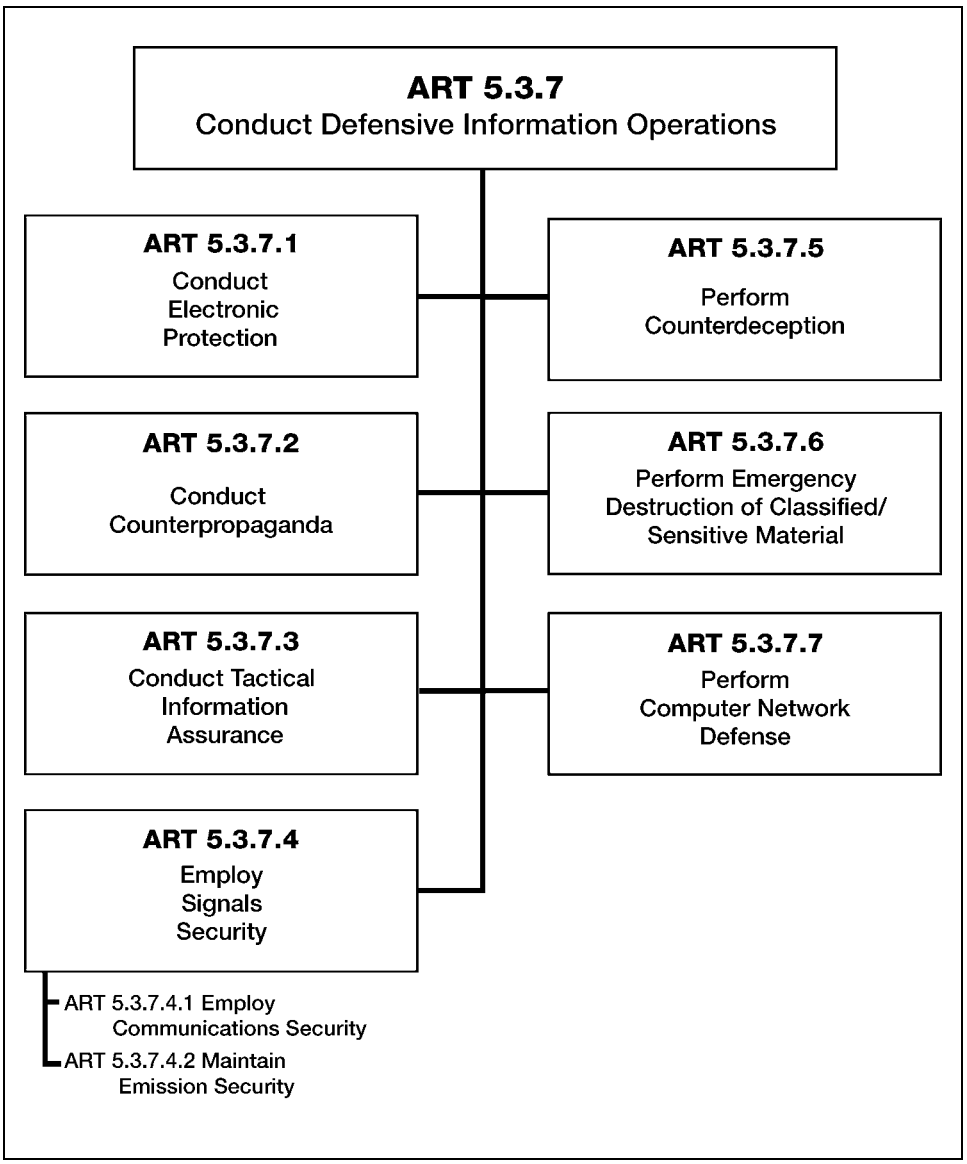
No.	Scale	Measure
01	Yes/No	Response to terrorist incident does not prevent unit/installation from accomplishing assigned missions.
02	Time	To conduct reconnaissance/criminal investigation of site where terrorist incident occurred.
03	Time	To establish/restore security around site where terrorist incident occurred.
04	Time	To conduct area damage control activities, such as firefighting, power restoration and production, rubble clearance, removal of downed trees, and repair of critical damaged facilities and installations.
05	Time	To report the occurrence of terrorist incident to appropriate headquarters and agencies.
06	Time	For response forces/teams to arrive at site of terrorist incident.
07	Time	To search for, collect, identify, and treat injured survivors of terrorist incident.

No.	Scale	Measure
08	Time	To search for, collect, identify, and process the remains of individuals killed in terrorist incident.
09	Time	To restore damaged facilities to desired level of functionality.
10	Percent	Decrease in attacked facilities capabilities to perform designed function.
11	Percent	Of response forces/teams arriving at terrorist incident site within desired response times.
12	Number	Of friendly force and noncombatant casualties due to terrorist incident.
13	Cost	To provide forces and supplies to provide local security and humanitarian aid and comfort, conduct area damage control, and restore damaged facility in response to a given terrorist incident.

ART 5.3.6.3 REDUCE VULNERABILITIES TO TERRORIST ACTS/ATTACKS

5-83. Reduce personnel vulnerability to terrorism by understanding the nature of terrorism, knowing current threats, identifying vulnerabilities to terrorist acts, and by implementing protective measures against terrorist acts/attack. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	Actions deter hostile actions against service members, civilian employees, family members, facilities, information, and equipment; or, when deterrence fails, mitigate the consequences of terrorist attacks against these potential targets.
02	Yes/No	Commander applies judgment to every situation and combines it with available technologies to manage risk.
03	Yes/No	Commander retains freedom of action by reducing friendly force vulnerability to terrorist actions.
04	Yes/No	Unit/installation antiterrorism program includes planned and integrated antiterrorism measures, counterterrorism, physical security, OPSEC, and personal protective services, supported by counterintelligence and other security programs.
05	Yes/No	Force protection planning is a continuous process.
06	Yes/No	Force protection assets focused on protecting the most critical assets.
07	Time	To understand how potential terrorists operate.
08	Time	To prioritize unit force protection efforts based upon criticality and vulnerability assessments.
09	Time	In advance that a force is warned of attack.
10	Percent	Of unit force protection activities integrated with those of other services and nations.
11	Percent	Reduction in enemy targeting effectiveness due to the implementation of force protection measures.
12	Percent	Reduction in the effectiveness of enemy action due to friendly measures to harden units and facilities from enemy attack.
13	Percent	Enhancement in personnel, equipment, and facility survivability because of measures taken to harden them from enemy attack.
14	Number	Of friendly and noncombatant casualties due to terrorist attack.
15	Cost	Of measures to protect the unit/installation from terrorist attack.



ART 5.3.7 CONDUCT DEFENSIVE INFORMATION OPERATIONS

5-84. Plan, coordinate, and integrate policies and procedures, operations, personnel, and technology to protect and defend information and information systems. Primary elements of defensive IO include information assurance, physical security, operations security, counterdeception, counterpropaganda, counterintelligence, electronic warfare, and special IO. (FM 3-13) (USACAC)

Note: While counterintelligence is doctrinally an element of defensive IO, it has its own task branch (ART 5.3.8) within the AUTL because its contributions to force protection and survivability extend well beyond the limits of defensive information operations.

No.	Scale	Measure
01	Yes/No	Unit course of action not compromised by enemy offensive IO.
02	Time	To develop and refine IO annex to operation order.
03	Time	To identify, determine appropriate response, and implement changes in response to a possible threat to friendly information systems.
04	Time	For friendly information and intelligence collection sensor system managers, operators, and emergency response teams/contact teams to respond, identify, and correct system failures attributed to enemy offensive IO.
05	Percent	Of time units in AO are in restrictive (INFOCON) condition.
06	Percent	Of friendly emitters in AO known to have been exploited by an enemy.
07	Percent	Of information systems hardware, software components, and databases backed up by replacement components or backup files in case of failure or compromise.
08	Percent	Of information system software components and databases protected by firewalls and virus detection software.
09	Number	Of times to reprogram information system software in response to identified threats.
10	Number	Of instances of enemy offensive IO disabling, corrupting, or compromising friendly information systems and intelligence collection sensors.
11	Number	Of instances of electronic fratricide in AO.

ART 5.3.7.1 CONDUCT ELECTRONIC PROTECTION

5-85. Plan and implement actions such as communications avoidance or communication anti-jamming measures to protect personnel, facilities, and equipment from friendly and enemy employment of electronic warfare (EW) that degrade, neutralize, or destroy friendly combat capability. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit course of action not compromised by enemy offensive IO.
02	Time	To develop and refine IO annex to operation order.
03	Time	For friendly information and intelligence collection sensor system managers, operators, and emergency response teams/contact teams to respond, identify, and correct system failures attributed to enemy offensive IO.
04	Time	To identify, determine appropriate response, and implement changes in response to a possible threat to information systems.
05	Percent	Of time units in AO are in restrictive INFOCON condition.
06	Percent	Of friendly emitters in AO known to have been exploited by an enemy.
07	Percent	Of information systems hardware, software components, and databases backed up by replacement components or backup files in case of failure or compromise.
08	Number	Of times to reprogram information system software in response to identified threats.

No.	Scale	Measure
09	Number	Of instances of enemy offensive IO disabling, corrupting, or compromising friendly information systems and intelligence collection sensors.
10	Number	Of instances of electronic fratricide in AO.

ART 5.3.7.2 CONDUCT COUNTERPROPAGANDA

5-86. Establish plans and procedures to counter enemy PSYOP based on an effective public affairs and education program to expose, discount, and inform targeted audiences of threat propaganda initiatives. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Enemy propaganda activities do not cause the abandonment of friendly courses of action.
02	Time	To identify enemy psychological warfare operations.
03	Time	To expose enemy attempts to influence friendly population and military forces.
04	Time	To design, produce, obtain approval, and disseminate accurate information to friendly force as a counter to enemy propaganda.
05	Time	To identify enemy propaganda design, production, and dissemination assets and nominate them as targets for lethal or nonlethal attack.
06	Percent	Of enemy propaganda activities detected and countered.
07	Percent	Of enemy potential themes identified and accounted for in the conduct of the unit's military decision making process, to including wargaming.
08	Percent	Of friendly public affairs and PSYOP efforts to conduct counterpropaganda activities.
09	Percent	Reduction in American civilian, host-nation, and third country support for friendly operations due to enemy psychological warfare operations.
10	Number	Of instances in which audiences targeted by enemy psychological warfare operations act in accordance with enemy instructions, such as desert their post and surrender to the enemy.
11	Number	Of enemy propaganda activities detected and countered.

ART 5.3.7.3 CONDUCT TACTICAL INFORMATION ASSURANCE

5-87. Plan, establish, and conduct programs and procedures to protect information and information systems. Implement safeguards and controls on data networks and computer systems. Ensure availability, integrity, authenticity, and security of information networks, systems, and data. Detect and react to compromises. Restore networks, systems, and data. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Systems administrators and operators perform risk assessment of potential threats to friendly information systems and take appropriate action to respond to those risks.

No.	Scale	Measure
02	Time	For information system emergency response teams to respond, identify and correct information system failures attributed to adversary offensive IO or criminal mischief.
03	Percent	Of information systems not protected by firewalls, virus detection software, and other appropriate defensive IO measures.
04	Percent	Of information systems hardware components, software programs, and databases that have backups to replace/duplicate them in case of failure or corruption.
05	Percent	Of enemy/criminal attempts to disable, corrupt, or compromise friendly information system components, software, and databases that are successful.
06	Percent	Of enemy/criminal attempts to disable, corrupt, or compromise friendly information system components, software, and databases detected by system administrators/operators and automated protective systems, such as firewalls.
07	Percent	Of friendly information systems linked to the internet.
08	Number	Of redundant communications paths available to connect information systems.
09	Number	Of attempts to disable, corrupt, or compromise friendly information system components, software, and databases.
10	Number	And types of friendly information systems linked to unsecured/secured internet.

ART 5.3.7.4 EMPLOY SIGNALS SECURITY

5-88. Deny the enemy access to electronic information (both communications and non-communications) that could be used to identify friendly capabilities and intentions. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Signals security compromises degrade, delay or modify unit operations.
02	Yes/No	Firewalls, virus protection software, or other defensive information operations measures protect unit information systems.
03	Time	To refine and synchronize signal and information operations annexes to operation order.
04	Time	To complete OPSEC assessment in AO.
05	Time	To identify improper occurrence of signals security.
06	Time	For appropriate information response teams to respond, identify, and correct information system failures attributed to enemy offensive information operations or criminal activity.
07	Percent	Increase or decrease in number of security violations on combat net radios in the AO within a given time.
08	Percent	Of successful enemy attempted penetration of friendly information systems.
09	Percent	Of emitter system administrators and operators who have current OPSEC training.
10	Percent	Of enemy sensor coverage in AO known to friendly force.

No.	Scale	Measure
11	Percent	Of identified friendly vulnerabilities in AO exploited by enemy actions.
12	Percent	Of electronic communications in AO encrypted or secured.
13	Percent	Of message traffic in AO exploited by enemy.
14	Percent	Of friendly emitters in AO exploited by enemy.
15	Percent	Of signals security measures previously assessed unsatisfactory that have improved based on assessment.
16	Percent	Of friendly operations conducted in a restrictive emission control (EMCON) environment.
17	Percent	Of units/installations/agencies in AO operating from a common signal operating instruction (SOI).
18	Percent	Of unit communications systems required to maintain more than one encryption system.
19	Number	Of security violations on combat net radios in the AO.
20	Number	Of teams fielded to monitor friendly emitters.
21	Number	Of interceptions of friendly communications during planning and execution.
22	Number	Of instances when frequency allocation or frequency management fails to prevent signal fratricide.

ART 5.3.7.4.1 Employ Communication Security

5-89. Deny the enemy information of value that might be derived from the possession and study of telecommunications. (FM 24-1) (USASC&FG)

No.	Scale	Measure
01	Yes/No	Communications security compromises degrade, delay or modify unit operations.
02	Time	To refine and synchronize signal annex to operation order.
03	Time	To complete COMSEC assessment in AO.
04	Time	To identify improper occurrences of COMSEC.
05	Percent	Increase or decrease in number of security violations on combat net radios in the AO within a given time.
06	Percent	Of enemy sensor coverage in AO known to friendly force.
07	Percent	Of successful enemy attempted penetration of friendly information systems.
08	Percent	Of information system administrators and operators who have current OPSEC training.
09	Percent	Of identified friendly communications vulnerabilities in AO exploited by enemy actions.
10	Percent	Of electronic communications in AO encrypted or secured.
11	Percent	Of message traffic in AO exploited by enemy.
12	Percent	Of friendly information systems in AO exploited by enemy.
13	Percent	Of communications security measures previously assessed unsatisfactory that have improved based on assessment.
14	Percent	Of friendly operations conducted in a restrictive EMCON environment.

No.	Scale	Measure
15	Percent	Of units/installations/agencies in AO operating from a common SOI.
16	Percent	Of unit communications systems requiring more than one encryption system.
17	Number	Of security violations on combat net radios in the AO.
18	Number	Of teams fielded to monitor friendly communication systems.
19	Number	Of interceptions of friendly communications during planning and execution.
20	Number	Of redundant communications paths available to connect operational information systems.

ART 5.3.7.4.2 Maintain Emission Security

5-90. Plan and implement measures to deny unauthorized persons information of value that might be derived from their interception and study of electromagnetic radiation. Select and control the use of electromagnetic, acoustic, or other emitters to optimize friendly operations and capabilities while minimizing detection by enemy sensors and mutual interference among friendly systems. (FM 6-02) (USASC&FG)

No.	Scale	Measure
01	Yes/No	Signals emission security compromises degrade, delay or modify unit operations.
02	Time	To refine and synchronize signal and information operations annexes to operation order.
03	Time	To complete OPSEC assessment in AO.
04	Time	To identify improper maintenance of emission security.
05	Percent	Of emitter system administrators and operators who have current OPSEC training.
06	Percent	Of enemy sensor coverage in AO known to friendly force.
07	Percent	Of identified friendly vulnerabilities in AO exploited by enemy actions.
08	Percent	Of electronic communications in AO encrypted or secured.
09	Percent	Of friendly emitters in AO exploited by enemy.
10	Percent	Of emission security measures previously assessed unsatisfactory that have improved based on new assessment.
11	Percent	Of friendly operations conducted in a restrictive EMCON environment.
12	Percent	Of friendly COAs that the enemy can determine based on his observation of friendly emitters.
13	Number	Of emission security violations in the AO in a given time.
14	Number	Of teams fielded to monitor friendly emitters.
15	Number	Of interceptions of friendly emitters during planning and execution.
16	Number	Of instances when frequency allocation or frequency management fails to prevent signal fratricide.

ART 5.3.7.5 PERFORM COUNTERDECEPTION

5-91. Conduct activities that preclude the commander from being deceived by enemy deception operations. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Friendly course of action is not affected by enemy deception except as desired to deceive the enemy when the friendly force accepts the enemy deception story.
02	Time	To identify adversary attempts to deceive friendly forces.
03	Time	To develop counterdeception operations options as required.
04	Percent	Of enemy deception activities detected.
05	Percent	Of enemy deception activities using multiple sources to transmit deception story.

ART 5.3.7.6 PERFORM EMERGENCY DESTRUCTION OF CLASSIFIED/SENSITIVE MATERIAL

5-92. Establish and execute procedures for the emergency destruction of classified materials. (AR 380-5) (USAIC&FH)

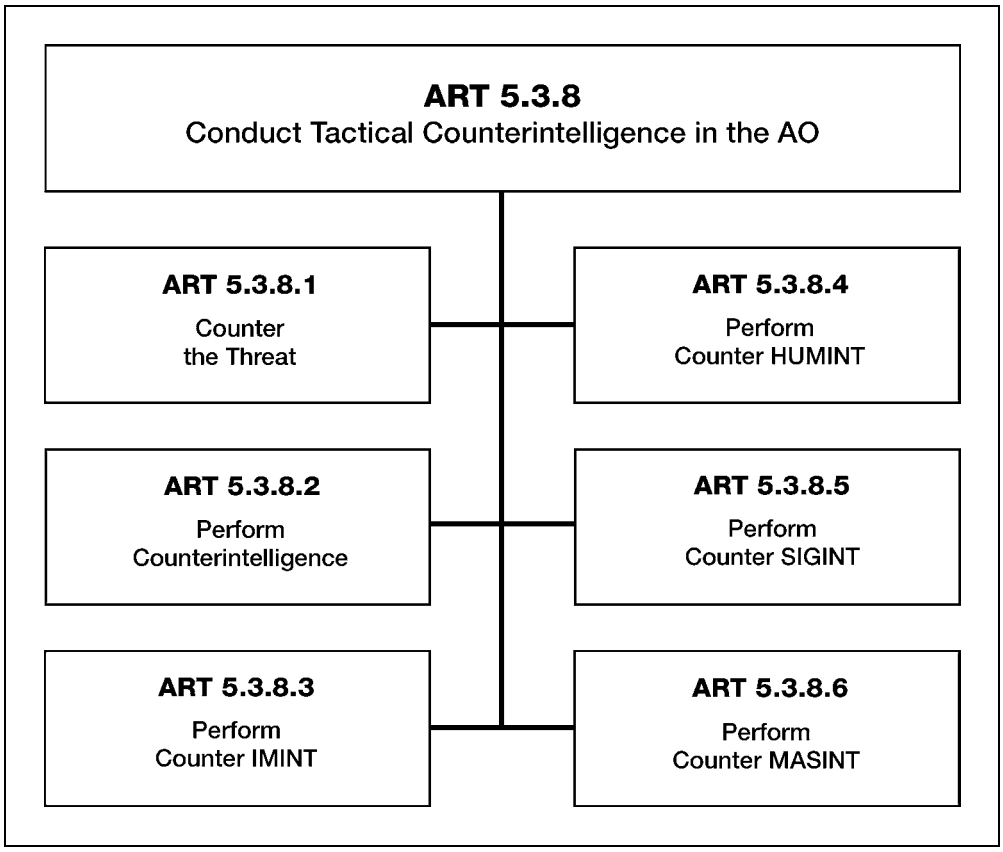
No.	Scale	Measure
01	Yes/No	Emergency destruction of classified/sensitive documents and other material accomplished without compromise of classified/sensitive information.
02	Time	To identify classified/sensitive material for destruction.
03	Time	To destroy classified/sensitive material.
04	Time	To develop and rehearse emergency destruction procedures.
05	Percent	Of identified classified/sensitive material identified for destruction that is actually destroyed.
06	Percent	Of classified/sensitive material accountability procedures followed during the emergency destruction process.
07	Percent	Of mission-capable, on-hand equipment to perform emergency destruction of classified/sensitive material.
08	Number	And types of paper shredders, thermal grenades, burn barrels, magnets, etc. used to perform emergency destruction of classified/sensitive material.
09	Number	And types of classified/sensitive documents and other material destroyed.

ART 5.3.7.7 PERFORM COMPUTER NETWORK DEFENSE

5-93. Computer network defense is actions to defend against unauthorized activity within computer networks. Computer network defense includes monitoring, detection, analysis, response, and restoration activities. These activities are performed by multiple disciplines, such as operations, network administrators, intelligence, counterintelligence, and law enforcement. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Enemy offensive information operations compromises unit COA.
02	Time	To develop and refine IO annex to operation order.
03	Time	To identify, determine appropriate response, and implement changes in response to a possible threat to information systems.

No.	Scale	Measure
04	Time	For friendly information and intelligence collection sensor system managers, operators, and emergency response teams/contact teams to respond, identify, and correct system failures attributed to enemy offensive IO.
05	Percent	Of time units in AO are in restrictive EMCON condition.
06	Percent	Of friendly emitters in AO known to have been exploited by an enemy.
07	Percent	Of information systems hardware, software components, and databases backed up by replacement components or backup files in case of failure or compromise.
08	Number	Of times to reprogram information system software in response to identified threats.
09	Number	Of instances of enemy offensive IO disabling, corrupting, or compromising friendly information systems and intelligence collection sensors.
10	Number	Of instances of electronic fratricide in AO.



ART 5.3.8 CONDUCT TACTICAL COUNTERINTELLIGENCE IN THE AREA OF OPERATIONS

5-94. Counterintelligence is designed to defeat or degrade threat intelligence collection capabilities. The intelligence staff will provide counterintelligence to the commander outlining the capabilities and limitations of threat

intelligence services, and develop TTP to limit or eliminate these capabilities. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Enemy intelligence operations directed against the unit and its personnel degrade, delay or modify unit operations.
02	Yes/No	Control element provides counterintelligence (CI) guidance.
03	Time	To conduct an area reconnaissance to identify hazards.
04	Time	To review CI plans for major tactical formations in AO.
05	Time	To conduct CI collection, operations, and investigations, create and maintain counterintelligence databases, analyze, assess CI information, and publish and disseminate, CI products and reports and provide technical support.
06	Time	To conduct CI screening and collection at EPW collection points or displaced civilian checkpoints.
07	Time	To conduct CI liaison with host-nation agencies and allied forces.
08	Time	To conduct the CI portion of a vulnerability assessment and recommend countermeasures.
09	Percent	Of friendly force operations in AO degraded, delayed, or modified due to successful enemy intelligence activities.
10	Percent	Of friendly force units in AO that have current counterintelligence training, such as SAEDA.
11	Percent	Of friendly force action designed to mislead/prevent enemy intelligence efforts.
12	Percent	Of units in AO that have active counterintelligence plans.
13	Number	Of enemy intelligence efforts detected by CI activities.
14	Number	Of CI teams available for use in AO.
15	Number	And quality of sources developed in AO.

ART 5.3.8.1 COUNTER THE THREAT

5-95. The task of providing the commander information and intelligence support for targeting the threat forces through lethal and nonlethal fires including electronic and information operations. Intelligence support to force protection and counterintelligence (CI) including the tactics, techniques and procedures to deny or degrade threat ISR capabilities to access and collect information and intelligence on friendly forces (FM 34-1). (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify threat capabilities and limitations.
02	Yes/No	Identify friendly force vulnerabilities to threat forces.
03	Yes/No	Develop countermeasures to deny or degrade threat capabilities.
04	Yes/No	Develop countermeasures to mitigate friendly force vulnerability.
05	Yes/No	Threat capabilities and friendly forces countermeasures identified in sufficient time to integrate into the plan, prepare, execute, and assess operations process.

No.	Scale	Measure
06	Yes/No	Countermeasures disseminated to friendly forces.
07	Time	To develop threat databases and templates.
08	Time	To develop countermeasures.
09	Percent	Of threat capabilities correctly identified.
10	Percent	Of countermeasures that effectively denied or degraded threat's ability.

ART 5.3.8.2 PERFORM COUNTERINTELLIGENCE

5-96. Gather information and conduct activities to protect against espionage, other intelligence activities, sabotage, or assassinations conducted by or on behalf of foreign governments or elements thereof, foreign organizations, or foreign persons, or international terrorist activities. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify threat intelligence collection capabilities and limitations.
02	Yes/No	Identify friendly forces vulnerabilities to threat intelligence collection.
03	Yes/No	Developed countermeasures to deny or degrade threat's ability to collect on friendly forces.
04	Yes/No	Develop countermeasures to mitigate friendly forces vulnerability to threat collection.
05	Yes/No	Threat capabilities and friendly forces countermeasures identified in sufficient time for implementation.
06	Time	To develop threat databases and templates.
07	Time	To develop countermeasures.
08	Percent	Of threat intelligence collection capabilities correctly identified.
09	Percent	Of countermeasures that effectively denied or degraded threat's ability to collect on friendly forces.

ART 5.3.8.3 PERFORM COUNTER-IMAGERY INTELLIGENCE

5-97. Counter imagery intelligence is designed to defeat or degrade threat imagery intelligence collection capabilities. The intelligence staff will provide counterintelligence to the commander outlining the capabilities and limitation of threat imagery intelligence services, and develop TTP to limit or eliminate these imagery capabilities. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify threat imagery intelligence collection capabilities and limitations.
02	Yes/No	Identify friendly forces vulnerabilities to threat imagery intelligence collection.
03	Yes/No	Developed countermeasures to deny or degrade threat's ability to collect on friendly forces with imagery assets.
04	Yes/No	Develop countermeasures to mitigate friendly forces vulnerability to threat collection.
05	Yes/No	Threat capabilities and friendly forces countermeasures identified in sufficient time for implementation.
06	Time	To develop threat databases and templates.
07	Time	To develop countermeasures.

No.	Scale	Measure
08	Percent	Of threat imagery intelligence collection capabilities correctly identified.
09	Percent	Of countermeasures that effectively denied or degraded threat's ability to collect on friendly forces with imagery assets.

ART 5.3.8.4 PERFORM COUNTER-HUMAN INTELLIGENCE

5-98. Counter human intelligence is designed to defeat or degrade threat human intelligence collection capabilities. The intelligence staff will provide counterintelligence to the commander outlining the capabilities and limitation of threat human intelligence services, and develop TTP to limit or eliminate these human intelligence capabilities. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify threat human intelligence collection capabilities and limitations.
02	Yes/No	Identify friendly force vulnerabilities to threat human intelligence collection.
03	Yes/No	Develop countermeasures to deny or degrade threat's ability to collect on friendly forces.
04	Yes/No	Develop countermeasures to mitigate friendly forces vulnerability to threat human collection.
05	Yes/No	Threat capabilities and friendly forces countermeasures identified in sufficient time for implementation.
06	Time	To develop threat databases and templates.
07	Time	To develop countermeasures.
08	Percent	Of threat HUMINT collection capabilities correctly identified.
09	Percent	Of countermeasures that effectively denied or degraded threat's ability to collect on friendly forces using HUMINT.

ART 5.3.8.5 PERFORM COUNTER-SIGNALS INTELLIGENCE

5-99. Counter signals intelligence is designed to defeat or degrade threat signal intelligence collection capabilities. The intelligence staff will provide counterintelligence to the commander outlining the capabilities and limitation of threat signal intelligence services, and develop TTP to limit or eliminate these signal intelligence capabilities. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify threat signal intelligence collection capabilities and limitations.
02	Yes/No	Identify friendly forces vulnerabilities to threat signal intelligence collection.
03	Yes/No	Develop countermeasures to deny or degrade threat's ability to collect on friendly force use of the electromagnetic spectrum.
04	Yes/No	Develop countermeasures to mitigate friendly force vulnerability to threat signal collection.
05	Yes/No	Threat capabilities and friendly force countermeasures identified in sufficient time for implementation.
06	Time	To develop threat databases and templates.

No.	Scale	Measure
07	Time	To develop counter measures.
08	Percent	Of threat SIGINT collection capabilities correctly identified.
09	Percent	Of countermeasures that effectively denied or degraded threat's ability to collect on friendly force using SIGINT.

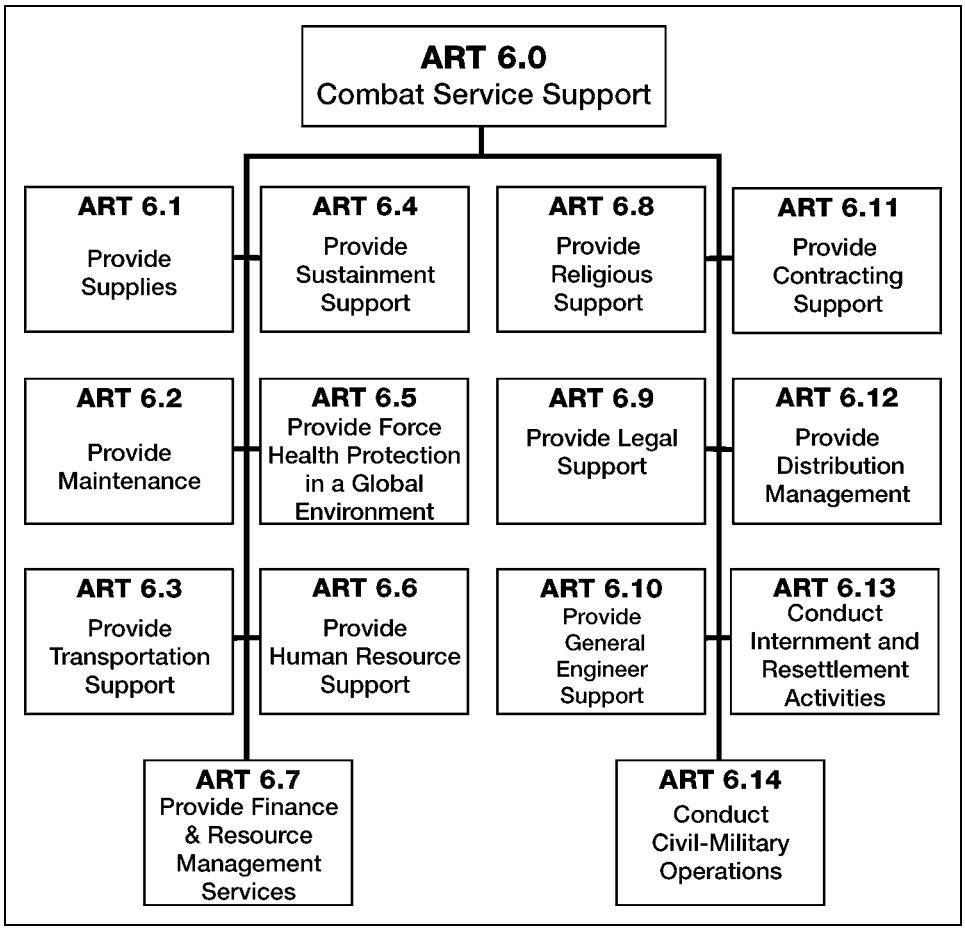
ART 5.3.8.6 PERFORM COUNTER-MEASUREMENT AND SIGNATURE INTELLIGENCE

5-100. Counter measurement and signature intelligence is designed to defeat or degrade threat measurement and signature intelligence collection capabilities. The intelligence staff will provide counterintelligence to the commander outlining the capabilities and limitation of threat measurement and signature intelligence services, and develop TTP to limit or eliminate these MASINT capabilities. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	Identify threat measurement and signature intelligence collection capabilities and limitations.
02	Yes/No	Identify friendly force vulnerabilities to threat measurement and signature intelligence collection.
03	Yes/No	Develop countermeasures to deny or degrade threat's ability to collect on friendly force.
04	Yes/No	Develop countermeasures to mitigate friendly force vulnerability to threat measurement and signature collection.
05	Yes/No	Threat capabilities and friendly force countermeasures identified in sufficient time for implementation.
06	Time	To develop threat databases and templates.
07	Time	To develop countermeasures.
08	Percent	Of threat measurement and signature intelligence collection capabilities correctly identified.
09	Percent	Of countermeasures that effectively denied or degraded threat's ability to collect on friendly forces using MASINT.

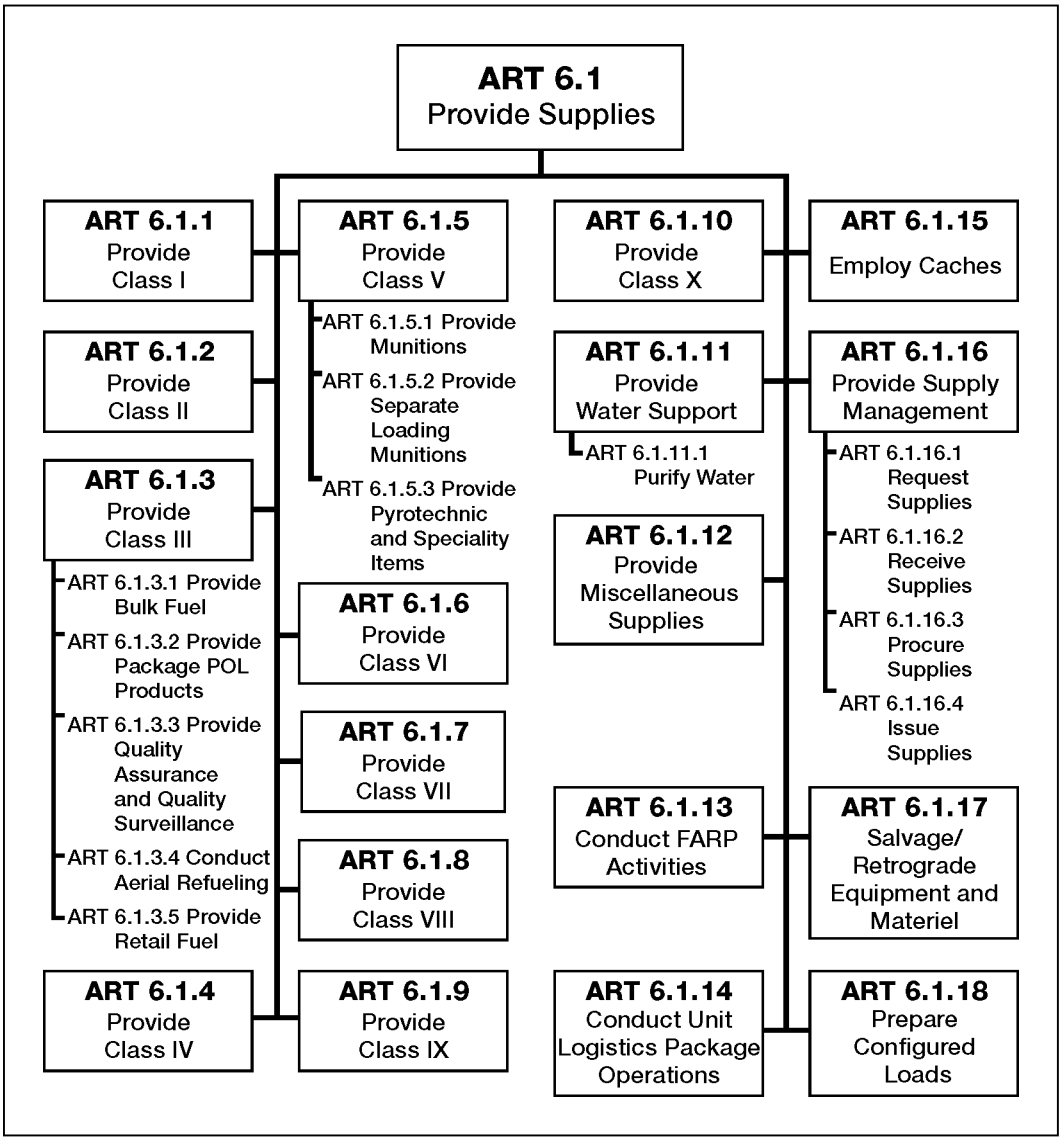
Chapter 6

ART 6.0: The Combat Service Support Battlefield Operating System



The Combat Service Support (CSS) BOS is the support and services to sustain forces during full spectrum operations. It includes many technical specialties and functional activities. These include the functions within the Army's framework of CSS (FM 100-10): supply, maintenance, transportation, combat health support, human resource support, legal support, finance, religious support, contracting support, distribution management, field and other service support as well as general engineering. The CSS BOS includes all aspects of civil-military operations falling under the Joint Staff definition of force sustainment (see JP 1-02).

The supported force may be joint, multinational, or interagency in nature. Army forces may also provide CSS to contractors, civilians (including refugees and disaster victims), or members of nongovernmental organizations (NGOs).



SECTION I – ART 6.1: PROVIDE SUPPLIES

6-1. Provide all classes of supply necessary to equip, maintain, and operate military units. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	The unit has supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for supplies before it can conduct its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Time	Of supply stockpiled in AO to support operations.
07	Time	Of sustainment supply in AO supported by available facilities.
08	Percent	Difference between planned and actual demand by type of supply in AO.
09	Percent	Of planned supply support achieved in AO.
10	Percent	Of supplies available in AO compared to requirements by type of supply.
11	Percent	Of replenishment stocks in AO delivered on time.
12	Percent	Of shortfalls in supply that have acceptable alternatives.
13	Percent	Of required supplies delivered in AO.
14	Percent	Of operations degraded, delayed, or modified due to delays in moving or evacuating personnel, supplies, and equipment.
15	Percent	Of requisitions in AO filled.
16	Percent	Of required delivery date (RDD) in AO achieved.
17	Percent	Of requisitions in AO filled from shelf stocks.
18	Percent	Of critical replenishment stocks in AO that experienced late delivery.
19	Number	Of tons per day of supplies and equipment in AO delivered to operating forces by class of supply.

ART 6.1.1 PROVIDE SUBSISTENCE (CLASS I)

6-2. Provide food in bulk or prepackaged rations and bottled water. This task also includes the provision of health and comfort packages, such as disposable razors and other personnel care items, other AAFES tactical field exchanges are operational. (FM 10-23) (CASCOM)

Note: The task of inspecting Class I and Class I sources is contained in ART 6.5.4.4. (Provide Veterinary Services).

No.	Scale	Measure
01	Yes/No	The unit has class I supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class I supplies before it can conduct its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.

No.	Scale	Measure
06	Time	Of class I supply stockpiled in AO to support operations.
07	Time	Of sustainment supply in AO supported by available facilities.
08	Percent	Difference between planned and actual demand by supply line in AO.
09	Percent	Of planned class I supply support achieved in AO.
10	Percent	Of class I supplies available in AO compared to requirements.
11	Percent	Of replenishment stocks delivered on time in AO.
12	Percent	Of shortfalls in class I supply in AO that have acceptable alternatives.
13	Percent	Of required class I supplies in AO delivered.
14	Percent	Of operations degraded, delayed, or modified due to delays in moving class I supplies.
15	Percent	Of class I supply requisitions filled in AO.
16	Percent	Of RDD for class I supplies in AO achieved.
17	Percent	Of critical replenishment stocks in AO that experienced late delivery.
18	Percent	Of class I supplies provided by host nation.
19	Number	Of tons per day of class I supply in AO delivered to operating forces.

ART 6.1.2 PROVIDE CLOTHING, INDIVIDUAL EQUIPMENT, TOOLS, AND ADMINISTRATIVE SUPPLIES (CLASS II)

6-3. Provide clothing, individual equipment, tentage, organizational tool sets and kits, hand tools, geospatial products (maps), administrative and housekeeping supplies and equipment. (FM 10-27) (CASCOM)

No.	Scale	Measure
01	Yes/No	The unit has class II supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class II supplies before it can conduct its mission.
03	Time	To refine supply support program for AO after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Time	Of class II supply stockpiled in AO to support operations.
07	Time	Of sustainment supply in AO supported by available facilities.
08	Percent	Difference between planned and actual demand by supply line in AO.
09	Percent	Of planned class II supply support achieved in AO.
10	Percent	Of class II supplies available in AO compared to requirements.
11	Percent	Of replenishment stocks delivered on time in AO.
12	Percent	Of shortfalls in class II supply in AO that have acceptable alternatives.
13	Percent	Of required class II supplies in AO delivered.
14	Percent	Of operations degraded, delayed, or modified due to delays in moving class II supplies.
15	Percent	Of class II supply requisitions filled in AO.
16	Percent	Of RDD for class II supplies in AO achieved.
17	Percent	Of critical replenishment stocks in AO that experienced late delivery.

No.	Scale	Measure
18	Percent	Of class II supplies provided by host nation.
19	Number	Of tons per day of class II supply in AO delivered to operating forces.

ART 6.1.3 PROVIDE PETROLEUM, OIL, AND LUBRICANTS (CLASS III B/P)

6-4. Supply bulk fuel and packaged petroleum products. (FM 10-67) (CASCOM)

No.	Scale	Measure
01	Yes/No	The unit has sufficient class III supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class III supplies before it can conduct its mission.
03	Time	To develop replenishment concept after receipt of warning order.
04	Time	Of operational delay due to fuel shortages.
05	Time	Of supply of required fuel in place to support campaign.
06	Percent	And type of daily class III provided by host nation.
07	Percent	And type of required fuel delivered to theater.
08	Percent	Of fuel delivery capacity available in theater.
09	Percent	Of attempted deliveries destroyed by enemy action.
10	Percent	Of destroyed fuel deliveries anticipated and compensated for.
11	Percent	Of refueling capability available in theater at times and places needed.
12	Percent	Of total refueling assets available to support operational forces in theater.
13	Percent	Time phased force deployment data (TPFDD) bulk fuel units deployed and operating.
14	Percent	Of available fuel lost to spills.
15	Number	Of gallons per day lost to spills.
16	Number	Of gallons and types of fuel delivered to theater.

ART 6.1.3.1 PROVIDE BULK FUEL

6-5. Provide bulk fuels to units using tankers, rail tank cars, hose lines, or bulk transporters. ART 6.1.3.1 includes the conduct of refueling on the move. (FM 10-67) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has the necessary bulk class III supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for bulk class III supplies before it can conduct its mission.
03	Time	To develop replenishment concept after receipt of warning order.
04	Time	Of operational delay due to fuel shortages.
05	Time	Of supply of required fuel in place to support campaign.
06	Percent	And type of daily class III bulk fuel provided by host nation.
07	Percent	And type of required bulk fuel delivered to theater.
08	Percent	Of bulk fuel deliveries completed compared to forecasted requirements.

No.	Scale	Measure
09	Percent	Of bulk fuel delivery capacity available in theater.
10	Percent	Of attempted deliveries destroyed by enemy action.
11	Percent	Of destroyed bulk fuel deliveries anticipated and compensated for.
12	Percent	Of bulk refueling capability available in theater at times and places needed.
13	Percent	Of total bulk refueling assets available to support operational forces in theater.
14	Percent	Of TPFDD bulk fuel units deployed and operating.
15	Percent	Of available bulk fuel lost to spills.
16	Number	Of gallons per day of bulk fuel lost to spills.
17	Number	Of gallons and types of bulk fuel delivered to theater.

ART 6.1.3.2 PROVIDE PACKAGED PETROLEUM, OILS, AND LUBRICANTS PRODUCTS

6-6. Provide packaged products—including lubricants, greases, hydraulic fluids, compressed gasses, and specialty items—that are stored, transported, and issued in containers with a capacity of 55 gallons or less. (FM 10-67) (CASCOM)

No.	Scale	Measure
01	Yes/No	The unit has class III supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for packaged class III supplies before it can conduct its mission.
03	Time	To refine the supply support program for an AO after receipt of warning order.
04	Time	Of operational delay due to fuel shortages.
05	Time	Of supply of required packaged petroleum products in place to support operations.
06	Percent	And type of daily class III packaged petroleum products provided by host nation.
07	Percent	And type of required packaged petroleum products delivered to theater.
08	Percent	Of packaged petroleum products deliveries completed compared to forecasted requirements.
09	Percent	Of attempted deliveries destroyed by enemy action.
10	Number	Of gallons per day and type of packaged petroleum products delivered to theater.

ART 6.1.3.3 PROVIDE QUALITY ASSURANCE AND QUALITY SURVEILLANCE

6-7. Quality assurance is a contract administration function performed by the government in determining whether contractors fulfill requirements and specifications for petroleum products and related services. Quality surveillance includes the measures used to determine and maintain the quality of government-owned petroleum products to ensure that such products are suitable for their intended use. Quality surveillance ensures that products meet quality standards after acceptance from the contractor as

well as after transfer between government agencies or issue to users. (FM 10-67-2) (CASCOM)

No.	Scale	Measure
01	Yes/No	Class III supplies do not cause damage to the equipment when used IAW normal safeguards.
02	Yes/No	The unit does not have to delay operations to purge equipment fuel and lubrication systems of contamination.
03	Time	To develop a program that ensures military petroleum products are procured under federal or military specification.
04	Percent	Of fuel meeting DOD Manual 4140.25-M inspection specifications.
05	Percent	Of fuel receiving tested IAW applicable regulations and standards.
06	Percent	Of laboratories provided and maintained for testing fuels and lubricants IAW applicable regulations.
07	Percent	Of agencies maintaining a quality surveillance program as prescribed in applicable regulations.
08	Percent	Of fuel certified by USAPC.
09	Percent	Of fuel products in excess of 10,000 gallons IAW DA PAM 710-2-1.
10	Percent	Of fuel products meeting standards established by AR 200-1 and the Air Pollution Abatement Program.
11	Percent	Of fuel tested IAW American Society for Testing and Materials or Federal Test Methods Standard standards.
12	Percent	Of fuel suppliers IAW STANAG 2115.

ART 6.1.3.4 CONDUCT AERIAL REFUELING

6-8. Use Army special operations forces aviation capabilities to receive aerial refueling to extend the range of rotary-wing insertion/exfiltration platforms. (FM 3-05.60) (USAAVNC)

No.	Scale	Measure
01	Yes/No	Unit has aerial refueling capabilities to conduct its mission.
02	Yes/No	Aerial refueling assets required to support mission accomplishment were where they were supposed to be at the time and with the quantities specified in the operations order.
03	Time	To provide aerial fuel resupply concept after receipt of warning order.
04	Time	To conduct aerial refueling operations.
05	Percent	Of daily aerial refueling requirements provided by organic support assets.
06	Percent	Of required bulk fuel delivered to units.
07	Percent	Of bulk fuel delivery capacity available.
08	Percent	Of required aerial refueling support assets available for the operation.
09	Percent	Of bulk aerial refueling capability available in theater at times and places needed.
10	Percent	Of total bulk refueling assets available to support operational forces in theater.
11	Number	Of gallons/pounds of fuel available in AO.
12	Number	Of days of required fuel in place to support operation.

No.	Scale	Measure
13	Number	Of total flying hours for each aircraft.
14	Number	Of kilometers between support locations and supported forces.
15	Number	Of aviation platforms requiring fuel.
16	Number	Of gallons per day of bulk aviation fuel lost to spills.

ART 6.1.3.5 PROVIDE RETAIL FUEL

6-9. Provide retail fuels to individual systems from tankers, rail tank cars, hose lines, or bulk transporters. (FM 10-67) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has the necessary bulk class III supplies to conduct its mission.
02	Time	That the supply of required fuel in place to support campaign.
03	Percent	And type of daily class III retail fuel requirements provided by host nation.
04	Percent	Of retail fuel deliveries completed compared to forecasted requirements.
05	Percent	Of available retail fuel lost to spills.
06	Number	Of gallons per day of retail fuel lost to spills.
07	Number	Of gallons and types of retail fuel delivered to users within the AO.

ART 6.1.4 PROVIDE BARRIER AND CONSTRUCTION MATERIAL (CLASS IV)

6-10. Provide construction materials including installed equipment and all fortification and barrier materials. ART 6.1.4 includes the conduct of quarry, sawmill, and rock-crushing operations, and the production of asphalt and concrete. (FM 10-27) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class IV supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class IV supplies before it can conduct its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Percent	Difference between projected engineer construction material requirements and actual requirements in AO.
07	Percent	Of planned class IV supply support achieved in AO.
08	Percent	Of class IV supplies available in AO compared to requirements.
09	Percent	Of replenishment stocks delivered on time in AO.
10	Percent	Of shortfalls in class IV supply in AO that have acceptable alternatives.
11	Percent	Of required class IV supplies in AO delivered.
12	Percent	Of operations degraded, delayed, or modified due to delays in providing class IV supplies to the right locations in the right quantities.
13	Percent	Of class IV supply requisitions filled in AO.
14	Percent	Of RDD for class IV supplies in AO achieved.

No.	Scale	Measure
15	Percent	Of critical replenishment stocks in AO that experienced late delivery.
16	Percent	Of class IV supplies provided by host nation.
17	Number	Of days of class IV supply stockpiled in AO to support campaign.
18	Number	Of days of sustainment supply in AO supported by available facilities.
19	Number	Of sawmills operating within the AO.
20	Number	Of rock crushing facilities/quarries operating within AO.
21	Number	And types of class IV supply in tons/day delivered to forces within the AO.

ART 6.1.5 PROVIDE AMMUNITION (CLASS V)

6-11. Provide the right type and quantity of ammunition to the force. (FM 9-6) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class V supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class V supplies before it can conduct its mission.
03	Time	To determine suitable munitions available in theater after receipt of warning order.
04	Time	To develop replenishment concept after receipt of warning order.
05	Time	After RDD that replenishment stocks are delivered.
06	Percent	Of required lift available.
07	Percent	Of minimum safety level of build-up stocks maintained at staging areas.
08	Percent	Of munitions at zero balance.
09	Percent	Of munition lines below required supply rates.
10	Percent	Of TPFDD ammunition units deployed and operational.
11	Percent	Capacity of TPFDD ammunition units deployed and operational.
12	Percent	Of unit missions delayed due to shortfall in major equipment items.
13	Percent	Of high-priority targets attacked with preferred munitions.

ART 6.1.5.1 PROVIDE MUNITIONS

6-12. Supply munitions—small arms ammunition, grenades, mines, rockets, missiles, and tank and field artillery rounds—to the force. (FM 9-6) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class V supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class V supplies before it can conduct its mission.
03	Time	After receipt of warning order to determine if suitable munitions are available within the AO.
04	Time	After RDD that replenishment stocks are delivered.
05	Percent	Of minimum safety level of build-up stocks maintained at staging areas.
06	Percent	Of required reception and onward movement support available.
07	Percent	Of missions delayed due to shortfall of munitions.

No.	Scale	Measure
08	Percent	Of fire missions delayed or not completed due to munitions shortfall.
09	Percent	Of high-priority targets requiring reattack because preferred munitions not available.
10	Percent	Of replenishment stocks delivered prior to RDD.
11	Number	Of days of supply supported by available facilities.

ART 6.1.5.2 PROVIDE SEPARATE LOADING MUNITIONS

6-13. Supply munitions items, such as separate loading field artillery rounds, that have distinct components. (FM 9-6) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class V supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class V supplies before it can conduct its mission.
03	Time	After receipt of warning order to determine if suitable munitions are available within the AO.
04	Time	After RDD that replenishment stocks of separate loading ammunition are delivered.
05	Percent	Of minimum safety level of build-up stocks maintained at staging areas.
06	Percent	Of required reception and onward movement support available.
07	Percent	Of missions delayed due to shortfall of separate loading munitions.
08	Percent	Of fire missions delayed or not completed due to separate loading munitions shortfall.
09	Percent	Of high-priority targets that require reattack because separate loading munitions not available.
10	Percent	Of replenishment stocks delivered prior to RDD.
11	Number	Of days of supply supported by available facilities.

ART 6.1.5.3 PROVIDE PYROTECHNIC AND SPECIALTY ITEMS

6-14. Supply munitions items such as explosive bolts, ejection cartridges, and demolition charges. (FM 9-6) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has pyrotechnic and specialty items to conduct its mission.
02	Yes/No	The unit does not have to wait for pyrotechnic and specialty items before it can conduct its mission.
03	Time	After receipt of warning order to determine if suitable munitions are available within the AO.
04	Time	After RDD that replenishment stocks of pyrotechnic/specialty items ammunition are delivered.
05	Percent	Of minimum safety level of build-up stocks maintained at staging areas.
06	Percent	Of required reception and onward movement support available.
07	Percent	Of missions delayed due to shortfall of pyrotechnic and specialty items.
08	Percent	Of fire missions delayed or not completed due to pyrotechnic/specialty items munitions shortfall.
09	Percent	Of high-priority targets that require re-attack because pyrotechnic/specialty items munitions not available.

No.	Scale	Measure
10	Percent	Of replenishment stocks delivered prior to RDD.
11	Number	Of days of supply supported by available facilities.

ART 6.1.6 PROVIDE PERSONAL DEMAND ITEMS (CLASS VI)

6-15. Coordinate and provide personal demand items, such as health and hygiene products and nonmilitary sales items. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has the necessary class VI supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class VI supplies before it can conduct its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of class VI supplies available in AO compared to requirements.
08	Percent	Of replenishment stocks delivered on time in AO.
09	Percent	Of shortfalls in class VI supply in AO that have acceptable alternatives.
10	Percent	Of required class VI supplies in AO delivered.
11	Percent	Of planned class VI supply support achieved in AO.
12	Percent	Of operations degraded, delayed, or modified due to delays in moving class VI supplies.
13	Number	Of days of class VI supply stockpiled in AO to support campaign.
14	Number	Of days of sustainment supply in AO supported by available facilities.
15	Number	Of tons per day of class VI supply in AO delivered to operating forces.

ART 6.1.7 PROVIDE MAJOR END ITEMS (CLASS VII)

6-16. Provide major end items, such as launchers, tanks, mobile machine shops, and vehicles. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class VII supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class VII supplies before it can conduct its mission.
03	Time	To achieve time-phased operating and safety levels of supply in AO.
04	Time	Required to develop or update plans to establish support operations after receipt of warning order.
05	Time	To develop concept of support sustainment requirements after receipt of warning order.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of planned class VII supply support achieved in AO.

No.	Scale	Measure
08	Percent	Of class VII supplies available in AO compared to requirements.
09	Percent	Of replenishment stocks delivered on time in AO.
10	Percent	Of shortfalls in class VII supply in AO that have acceptable alternatives.
11	Percent	Of required class VII supplies in AO delivered.
12	Percent	Of class VII supply requisitions filled in AO.
13	Percent	Of operations degraded, delayed, or modified due to delays in moving class VII supplies.
14	Percent	Of RDD for class VII supplies in AO achieved.
15	Percent	Of critical replenishment stocks in AO that experienced late delivery.
16	Percent	Of class VII supplies provided by host nation.
17	Number	Of days of class VII supply stockpiled in AO to support operations.
18	Number	Of days of sustainment supply in AO supported by available facilities.
19	Number	Of tons per day of class VII supply in AO delivered to operating forces.

ART 6.1.8 PROVIDE MEDICAL MATERIAL AND REPAIR PARTS (CLASS VIII)

6-17. Provide class VIII medical materiel to include medical supplies, equipment, and medical peculiar repair parts. (FM 4-02.1) (USAMEDDC&S)

Note: ART 6.5.3 (Provide Medical Logistics) addresses the other aspects of combat health logistics.

No.	Scale	Measure
01	Yes/No	Unit has class VIII supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class VIII supplies before it can conduct its mission.
03	Yes/No	Unit has Class VIII medical unique repair parts to conduct its mission.
04	Yes/No	Unit does not have to wait for Class VIII medical peculiar parts before it can conduct its mission.
05	Time	Required to develop or update plans to establish support operations after receipt of warning order.
06	Time	To transship class VIII supplies and medical equipment upon receipt of warning order.
07	Time	To provide emergency shipment of class VIII supplies within AO.
08	Time	To refine medical equipment maintenance and repair support program after receipt of warning order.
09	Time	To receive medical equipment peculiar repair parts after requisition.
10	Time	An average piece of medical equipment is not mission capable (awaiting parts).
11	Time	To requisition, procure, and provide critical medical equipment peculiar repair parts.
12	Percent	Difference between planned and actual demand by supply line in AO.
13	Percent	Of planned class VIII supply support achieved in AO.

No.	Scale	Measure
14	Percent	Of class VIII supplies require replenishment per day.
15	Percent	Of shortfalls in Class VIII supply in AO that have acceptable alternatives.
16	Percent	Of required Class VIII supplies in AO delivered.
17	Percent	Of operations degraded, delayed, or modified due to delays in moving Class VII supplies.
18	Percent	Of Class VIII supply requisitions filled in AO.
19	Percent	Of required delivery date (RDD) for Class VIII supplies in AO achieved.
20	Percent	Of critical replenishment stocks in AO that experienced late delivery.
21	Percent	Of Class VIII supplies (meeting regulatory requirements) provided by host nation.
22	Percent	Of average medical equipment down.
23	Percent	Of TPFDL medical logistics units deployed and operational.
24	Percent	Of medical equipment deadlined for supply.
25	Percent	Of Class VII medical equipment peculiar repair parts requirements provided by the host nation.
26	Number	Of instances when medical capability is unavailable due to shortage or lack of class VIII supplies or equipment.
27	Number	Of tons per day of Class VIII supply (and medical peculiar repair parts) in AO delivered to operating forces.

ART 6.1.9 PROVIDE REPAIR PARTS (CLASS IX)

6-18. Provide any part, subassembly, assembly, or component required for installation in the maintenance of an end item, subassembly, or component. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class IX supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class IX supplies before it can conduct its mission.
03	Time	To refine supply support program after receipt of warning order.
04	Time	To receive repair parts after requisition.
05	Time	An average piece of equipment is not mission capable (awaiting parts).
06	Time	To requisition, procure, and provide critical repair parts.
07	Percent	Of average equipment downtime.
08	Percent	Of TPFDD maintenance units deployed and operational.
09	Percent	Of equipment deadlined for supply.
10	Percent	Of transportation units deployed and operational.
11	Percent	Of class IX requirements provided by host nation.
12	Number	Of tons per day of class IX supply in AO delivered to operating forces.

ART 6.1.10 PROVIDE SUPPLIES FOR CIVILIAN USE (CLASS X)

6-19. Provide material to support nonmilitary programs, such as agriculture and economic development. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has class X supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for class X supplies before it can conduct its mission.
03	Yes/No	US and host-nation laws and regulations allow civilians to use the supplies provided.
04	Time	To establish liaison with appropriate host-nation civilian government officials in AO after receipt of mission.
05	Time	To coordinate host-nation support agreements on activation of the AO.
06	Percent	Of sustainment supplies in AO procured from host-nation sources.
07	Percent	Of logistic effort in AO provided by host nation.
08	Number	Of facilities used by US units in AO provided by host nation.
09	Number	Of host-nation support agreements in effect in AO.
10	Number	Of US military units that have host-nation liaison officers assigned in AO.
11	Number	Of tons per day of class X supplies in AO delivered for civilian use.

ART 6.1.11 PROVIDE WATER SUPPORT

6-20. Provide water. ART 6.1.11 includes purification, distribution, storage, and quality surveillance of water. (FM 10-52) (CASCOM)

Note: ART 6.10.3 (Provide Engineer Construction Support) addresses construction, repairing, maintenance, and operations of permanent and semi-permanent water facilities, such as the drilling of water wells.

No.	Scale	Measure
01	Yes/No	Unit has potable/nonpotable water supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for potable and nonpotable water before it can conduct its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of planned potable water support achieved in AO.
08	Percent	Of potable water generation equipment available in AO compared to requirements.
09	Percent	Of shortfalls in potable water generation and distribution equipment in AO that have acceptable alternatives.
10	Percent	Of required potable water in AO generated.
11	Percent	Of operations degraded, delayed, or modified due to delays in generating and distributing potable water.
12	Percent	Of potable water (bottled) provided by host nation.
13	Number	And types of potable water generation equipment stockpiled in AO to support operations.

No.	Scale	Measure
14	Number	Of days of sustainment supply in AO supported by available facilities.
15	Number	Of gallons per day of potable water in AO delivered to operating forces.

ART 6.1.11.1 PURIFY WATER

6-21. Provide and operate water purification equipment and facilities to provide potable water for consumption and use where purified water is required. (FM 10-52) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has potable water supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for potable water before it can conduct its mission.
03	Time	To refine field services program for AO after receipt of warning order.
04	Percent	Difference between planned and actual demand by supply line in AO.
05	Percent	Of planned capacity of water purification support achieved in AO.
06	Percent	Of operational water purification facilities and equipment in AO.
07	Percent	Of required gallons of water provided per day in AO.
08	Percent	Of water distribution system operational in AO on average.
09	Percent	Of total potable water production capacity utilized in AO on average.
10	Number	Of water purification teams in AO.
11	Number	Of water sources available in AO.
12	Number	Of days of water supply on hand in AO.
13	Number	Of gallons of potable water required per person per day in AO.
14	Number	Of gallons of potable water provided per person per day in AO.

ART 6.1.12 PROVIDE MISCELLANEOUS SUPPLIES

6-22. Provide miscellaneous supplies and captured materials. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit has miscellaneous supplies to conduct its mission.
02	Yes/No	The unit does not have to wait for miscellaneous supplies before it can conduct its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support for miscellaneous supply requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Time	To certify captured supplies as being safe substitutes for US supplies.
07	Percent	Difference between planned and actual demand by supply line in AO.
08	Percent	Of planned supply support for miscellaneous supplies achieved in AO.
09	Percent	Of miscellaneous supplies available in AO compared to requirements.
10	Percent	Of miscellaneous replenishment stocks delivered on time in AO.

No.	Scale	Measure
11	Percent	Of shortfalls in miscellaneous supplies that have acceptable alternatives.
12	Percent	Of supply lines in AO that can be supported by using captured supplies.
13	Percent	Of required miscellaneous supplies in AO delivered.
14	Percent	Of operations degraded, delayed, or modified due to delays in moving miscellaneous supplies.
15	Percent	Of miscellaneous supply requisitions filled in AO.
16	Percent	Of RDD for miscellaneous supplies in AO achieved.
17	Percent	Of critical replenishment stocks in AO that experienced late delivery.
18	Percent	Of miscellaneous supplies provided by host nation.
19	Percent	Of daily supply requirements for a particular item met by use of captured materiel.
20	Number	Of days of miscellaneous supplies stockpiled in AO to support operations.
21	Number	Of days of miscellaneous supplies in AO supported by available facilities.
22	Number	Of tons of miscellaneous supplies per day delivered to operating forces.

ART 6.1.13 CONDUCT FORWARD ARMING AND REFUELING POINT ACTIVITIES

6-23. Establish a temporary facility organized, equipped, and deployed to provide fuel and ammunition to employ helicopter units. A FARP is located closer to the AO than the aviation unit's CSS area. (FM 1-100) (USAAVNC)

No.	Scale	Measure
01	Yes/No	The FARP site contains supplies to allow the aviation element to continue its mission.
02	Yes/No	The FARP site was operational when and where necessary to support the aviation element.
03	Time	To provide forward aerial fuel and ammunition concept of support after receipt of warning order.
04	Time	To complete bulk refuel and rearm operations at the FARP, once aircraft arrive.
05	Percent	Of bulk fuel and ammunition distribution capacity available.
06	Percent	Of supplies destroyed by enemy action.
07	Percent	Of communication resources and support personnel available to support mission.
08	Percent	Of materiel handling equipment (MHE) available to support each mission and site.
09	Number	And types of aviation platforms requiring resupply.
10	Number	And types of supplies to support operation.
11	Number	Of gallons of bulk fuel delivered to FARP.
12	Number	And types of ordnance delivered to FARP.
13	Number	Of gallons/pounds of bulk fuel provided by organic assets.
14	Number	And types of ordnance provided by organic assets.
15	Number	Of total flying hours for each aircraft and number of miles between support location.

No.	Scale	Measure
16	Number	Of kilometers between support location.
17	Number	And types of platforms providing security.
18	Number	Of kilometers that the location of supported forces is offset from the location of supporting forces.
19	Number	And types of supplies destroyed by enemy action.
20	Number	Of casualties occurring during the conduct of the FARP operations resulting from enemy action and accidents.

ART 6.1.14 CONDUCT UNIT LOGISTICS PACKAGE OPERATIONS

6-24. Move a centrally organized resupply convoy originating at the task force trains for each company/team/platoon to and from that company/team/platoon's location. Each convoy carries items to sustain its supported company/team for a specific period, usually 24 hours or until the next scheduled LOGPAC. (FM 3-90.1) (USAARMS)

No.	Scale	Measure
01	Yes/No	The unit LOGPAC contains supplies to allow the unit to continue its mission.
02	Yes/No	Unit operations were not delayed by LOGPAC failure to arrive at the resupply site at the specified time.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To establish comprehensive surface movement plan on receipt of the warning order.
05	Time	For transport vehicles to upload supplies and equipment for supported units.
06	Times	For transport vehicles to travel to supported units, resupply the units, and return to point of origin.
07	Percent	Difference between planned and actual demand by supply line in AO.
08	Percent	Of projected surface transport available in AO.
09	Percent	Of operations degraded, delayed, or modified due to delays in moving or evacuating personnel, supplies, and equipment.
10	Percent	Of surface cargo in AO transported by wheeled/tracked vehicles.
11	Percent	Of roads available to transport supplies and equipment.
12	Percent	Of supplies lost to enemy action.
13	Percent	Of supplies transported by host nation.
14	Percent	Of personnel, supplies, and equipment in AO that arrive at destination on schedule.
15	Number	Of passengers transported (per day) by surface means in AO.
16	Number	Of kilometers between the brigade support area and field trains, and between the field trains and supported company.
17	Number	Of tons per day of supplies and equipment moved by surface transport in AO.
18	Number	Of tons per day of supplies and equipment in AO moved by organic units.

ART 6.1.15 EMPLOY CACHES

6-25. Hide supply stocks in isolated locations by such methods as burial, concealment, or submersion to support the operations of a designated force. ART 6.1.15 can routinely occur during the conduct of retrograde, evasion and recovery, and special operations. (FM 7-85) (USAIS)

No.	Scale	Measure
01	Yes/No	The caches allow the unit to continue its mission.
02	Yes/No	Unit operations were not delayed by an inability to find the cache due to inaccurate reporting of the cache's location.
03	Yes/No	Unit establishing the cache used cover and concealment to hide the location of the cache.
04	Time	To develop caches concept of support and determine specific quantities and types of supplies to place in caches after receipt of warning order.
05	Time	Before RDD that replenishment stocks are delivered.
06	Percent	Of required lift by mode available to emplace caches.
07	Percent	Of supplies destroyed by enemy forces.
08	Percent	Of supplies destroyed by environmental factors, to include damage from animals.
09	Percent	Of caches whose locations were accurately reported.
10	Number	Of caches established.
11	Number	And types of vehicles supported from each cache location.
12	Number	And types of enemy forces operating in AO.

ART 6.1.16 PROVIDE SUPPLY MANAGEMENT

6-26. Provide management for all classes of supplies and material. ART 6.1.16 includes procedures established for requesting, procuring, and issuing supplies while maintaining accountability and security of supply stocks. (FM 100-10) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit operations were not delayed by an inability to perform supply management.
02	Yes/No	The conduct of supply management enhanced the unit's ability to accomplish its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	To develop concept of support sustainment requirements after receipt of warning order.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of planned supply support achieved in AO.
08	Percent	Of supplies available in AO compared to requirements.
09	Percent	Of replenishment stocks in AO delivered on time.
10	Percent	Of shortfalls in supply that have acceptable alternatives.
11	Percent	Of required supplies delivered in AO.

No.	Scale	Measure
12	Percent	Of operations degraded, delayed, or modified due to delays in moving or evacuating personnel, supplies, and equipment.
13	Percent	Of requisitions in AO filled.
14	Percent	Of RDD in AO achieved.
15	Percent	Of requisitions in AO filled from shelf stocks.
16	Percent	Of critical replenishment stocks in AO that experienced late delivery.
17	Number	Of days of supplies stockpiled in AO to support operations.
18	Number	Of days of sustainment supplies in AO supported by available facilities.
19	Number	Of tons of supplies and equipment per day delivered to operating forces.

ART 6.1.16.1 REQUEST SUPPLIES

6-27. Submit a supply request to a supporting supply element. ART 6.1.16.1 includes company-sized and smaller units requesting all types of supplies from the organization such as the unit supply section, battalion support platoon, forward support company, or headquarters and distribution company responsible for sustaining them. ART 6.1.16.1 also includes determining requirements and on-hand/due-in stocks, preparing requisitions, and determining the source/location of supply items. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	The process of requesting supplies did not delay the conduct of unit operations.
02	Time	To refine supply sustainment program for the area of operation after receipt of warning order.
03	Time	To develop a concept of support and determine sustainment requirements after receipt of warning order.
04	Time	To achieve time-phased operating and safety levels of supply in AO.
05	Time	To process requisition in AO for replacement supplies and equipment.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of planned supply support achieved in AO.
08	Percent	Of supplies available in AO compared to requirements.
09	Percent	Of replenishment stocks in AO delivered on time.
10	Percent	Of shortfalls in supplies that have acceptable alternatives.
11	Percent	Of required supplies delivered in AO.
12	Percent	Of operations degraded, delayed, or modified due to delays in processing requisitions for needed supplies and equipment.
13	Percent	Of requisitions in AO filled.
14	Percent	Of RDD in AO achieved.
15	Percent	Of requisitions in AO filled from shelf stocks.
16	Percent	Of critical replenishment stocks in AO that experienced late delivery.
17	Percent	Of supply requisitions returned due to errors in the requisition process.
18	Number	Of days of supplies stockpiled in AO to support operations.
19	Number	Of days of sustainment supplies in AO supported by available facilities.

No.	Scale	Measure
20	Number	Of requisitions processed per day in AO.
21	Number	Of tons of supplies and equipment in AO delivered per day to operating forces.

ART 6.1.16.2 RECEIVE SUPPLIES

6-28. Replenish stocks to maintain required levels of supply. ART 6.1.16.2 includes maintaining unit basic loads or supply stocks required for a specific mission. It also includes determining the type and quantity of shipment, and performing quality assurance. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	The process of receiving supplies did not delay the conduct of unit operations.
02	Time	Required to develop or update plans to establish support operations after receipt of warning order.
03	Time	To develop concept of support sustainment requirements after receipt of warning order.
04	Time	To achieve time-phased operating and safety levels of supply in AO.
05	Time	To process requisition in AO for replacement supplies and equipment.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of planned supply support achieved in AO.
08	Percent	Of supplies available in AO compared to requirements.
09	Percent	Of replenishment stocks in AO delivered on time.
10	Percent	Of shortfalls in supply that have acceptable alternatives.
11	Percent	Of required supplies delivered in AO.
12	Percent	Of operations degraded, delayed, or modified due to errors in processing requisitions in AO for needed supplies and equipment.
13	Percent	Of requisitions in AO filled.
14	Percent	Of RDD in AO achieved.
15	Percent	Of critical replenishment stocks in AO that experienced late delivery.
16	Percent	Of supplies received in AO that are in error due to faulty requisitioning.
17	Percent	Of errors in requisitioning of supplies in AO found through quality assurance audit.
18	Number	Of days of sustainment supply in AO supported by available facilities.
19	Number	Of requisitions processed per day in AO.
20	Number	Of tons of supplies and equipment delivered per day to operating forces.

ART 6.1.16.3 PROCURE SUPPLIES

6-29. Obtain resources that may be available through such sources as local purchase, support agreements developed at command echelons, and foraging. ART 6.1.16.3 includes determining requirements for commercial sources and processing captured supplies. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to procure supplies do not negatively impact the unit's ability to accomplish its mission.
02	Time	Required to develop or update plans to establish support operations after receipt of warning order.
03	Time	To develop concept of support sustainment requirements after receipt of warning order.
04	Time	To process requisition in AO for replacement supplies and equipment from procurement sources.
05	Time	To achieve time-phased operating and safety levels of supply in AO.
06	Percent	Difference between planned and actual demand by supply line in AO.
07	Percent	Of planned supply support achieved in AO.
08	Percent	Of supplies procured in AO compared to requirements.
09	Percent	Of replenishment stocks in AO delivered on time.
10	Percent	Of shortfalls in supply that have acceptable alternatives.
11	Percent	Of required procurements completed in AO.
12	Percent	Of operations degraded, delayed, or modified in AO due to procurement shortfall.
13	Percent	Of requisitions in AO filled by procurement from interservice support agreements.
14	Percent	Of RDD in AO achieved for supply procurement items.
15	Percent	Of procurement requirements in AO provided by host nation.
16	Percent	Of critical replenishment stocks from procurement in AO that experienced late delivery.
17	Percent	Of supplies received through procurement agencies in AO that are in error due to faulty requisitioning.
18	Percent	Of procured items obtained from captured enemy supplies and equipment.
19	Number	Of requisitions for procurement items processed per day in AO.
20	Number	Of tons of supplies and equipment procured per day for operating forces.

ART 6.1.16.4 ISSUE SUPPLIES

6-30. Provide supplies to using activities and units. ART 6.1.16.4 includes determining methods of issue that maintain supply accountability, establish/operate transfer/distribution points, and reissue supplies. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to issue supplies do not negatively impact the unit's ability to accomplish its mission.
02	Time	Required to develop or update plans to establish support operations after receipt of warning order.

No.	Scale	Measure
03	Time	To develop supply distribution system after receipt of warning order.
04	Percent	Difference between planned and actual demand by supply line in AO.
05	Percent	Of planned supply distribution capability achieved in AO.
06	Percent	Of supply distribution points established in AO compared to requirements.
07	Percent	Of supplies and equipment in AO issued via the service station method.
08	Percent	Of supplies and equipment in AO issued via the tailgate method of issue.
09	Percent	Of operations degraded, delayed, or modified in AO due to time delays caused by failure to distribute supplies and equipment to the operating forces.
10	Percent	Of supply distribution capability in AO provided by host nation.
11	Number	Of major supply distribution points established in AO.

ART 6.1.17 SALVAGE AND RETROGRADE EQUIPMENT AND MATERIEL

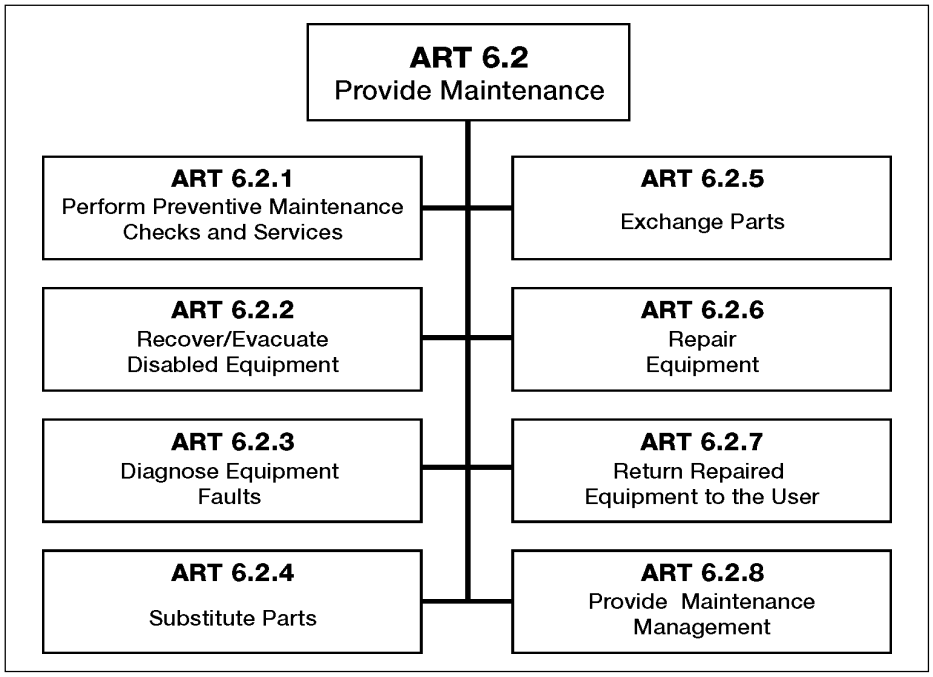
6-31. Save, rescue, or retrograde condemned, discarded, or abandoned property and materiel, or operational stocks and supplies not consumed for reuse, refabrication, or scrapping. ART 6.1.17 includes receiving materiel at collection points, classifying materiel, and determining the disposition of and disposing of the materiel. (FM 10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to salvage/retrograde equipment and materiel do not negatively impact on the unit's ability to accomplish its mission.
02	Time	Required to develop or update plans to establish support operations after receipt of warning order.
03	Time	To develop concept of salvage and restoration after receipt of warning order.
04	Percent	Difference between planned and actual demand by supply line in AO.
05	Percent	Of planned salvage capability achieved in AO.
06	Percent	Of salvage collection points established in AO compared to requirements.
07	Percent	Of salvaged supplies and equipment in AO reusable as is.
08	Percent	Of salvaged supplies and equipment in AO reusable after refabrication.
09	Percent	Of salvaged supplies and equipment in AO converted to scrap metal.
10	Percent	Of salvaged supplies and equipment in AO discarded as unusable.
11	Percent	Of salvaged property in AO converted to use by the operating forces.
12	Percent	Of salvage capability in AO provided by host nation.
13	Number	Of salvage collection points established in AO.

ART 6.1.18 PREPARE CONFIGURED LOADS

6-32. Configure a load at a supply activity for a user. (FM 63-11) (CASCOM)

No.	Scale	Measure
01	Yes/No	Configured loads support the unit in accomplishing its mission.
02	Yes/No	Procedures to prepare configured loads do not negatively impact on the supported unit's ability to accomplish its mission.
03	Time	Required to develop or update plans to establish support operations after receipt of warning order.
04	Time	Longevity of each type of projected mission in AO.
05	Percent	Difference between planned and actual demand by supply line in AO.
06	Percent	Of host-nation support available in AO.
07	Number	Of personnel in AO requiring support.
08	Number	And type of vehicles requiring support in AO.
09	Number	Of composite items within a single request for each type of unit in AO.
10	Number	And type of weapons systems and other equipment in each supported unit that require resupply.
11	Number	Of rounds of ammunition each weapon system in the supported unit consumes per mission.
12	Number	And types of transport used to move supplies.
13	Number	Of days of supply for all classes/line numbers of supply on hand.



SECTION II – ART 6.2: PROVIDE MAINTENANCE

6-33. Repair and maintain the availability of weapons systems and equipment. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	Weapons systems and equipment support the unit in accomplishing its mission.
02	Time	Average equipment downtime.
03	Time	Turnaround time for repair of priority combat equipment.
04	Time	To refine salvage/recovery plans after receipt of warning order.
05	Time	To diagnose malfunctioning equipment.
06	Time	To complete diagnosis, troubleshoot, and determine repair parts requirements for faulty equipment.
07	Time	To refine substitution policy after receipt of warning order.
08	Time	To diagnose, determine subsystem availability, and perform substitution to return major combat equipment to service.
09	Time	To refine direct exchange policy after receipt of warning order.
10	Time	To diagnose, determine direct exchange availability, and perform the exchange to return major combat equipment to service.
11	Time	Of average downtime for deadlined equipment using the direct exchange pipeline.
12	Time	To obtain replacement parts.
13	Time	To repair and return equipment.
14	Time	To refine the concept and policies for equipment repair, maintenance, and evacuation, and provide for establishment of maintenance facilities, after receipt of warning order.
15	Percent	Of PMCS tasks completed.
16	Percent	Of PMCS tasks deferred.
17	Percent	Of equipment operationally ready at any given time.
18	Percent	Of friendly damaged equipment recovered.
19	Percent	Of enemy abandoned equipment recovered.
20	Percent	Of damaged/abandoned material left on the battlefield due to failure to timely report.
21	Percent	Of malfunctioning equipment deadlined with misdiagnosis.
22	Percent	Of equipment unavailable due to substitution/cannibalization.
23	Percent	Of substitutions completed through use of salvage/disposal material.
24	Percent	Of substitutions completed through use of authorized cannibalization within unit.
25	Percent	Of deadlined equipment returned to service through direct exchange.
26	Percent	Of direct exchanges unsuccessful due to faulty record keeping.
27	Percent	Of average equipment downtime.
28	Percent	Of TPFDD maintenance units deployed and operational.
29	Percent	Of equipment deadlined for maintenance.
30	Percent	Of equipment deadlined for supply.
31	Percent	Of equipment failures successfully repaired.
32	Percent	Of maintenance capability provided by host nation.
33	Percent	Of maintenance facilities and sites secure from attack.

No.	Scale	Measure
34	Percent	Of operations degraded, delayed, or modified due to faulty maintenance management.
35	Percent	Of operations that address collection, classification, and disposition of enemy material.
36	Percent	Of captured enemy materiel collected, classified, and disposed of IAW instructions from appropriate material management center.
37	Number	Of PMCS tasks.
38	Number	Of PMCS tasks deferred.
39	Number	Of PMCS tasks completed.
40	Number	Of instances when unit operations are degraded, delayed, or modified due to ongoing recovery operations.
41	Number	Of instances when unit operations are degraded, delayed, or modified due to lack of skilled mechanics and diagnostic equipment.

ART 6.2.1 PERFORM PREVENTATIVE MAINTENANCE CHECKS AND SERVICES

6-34. Conduct PMCS to quickly identify potential problems. ART 6.2.1 includes quick turnaround repairs by component replacement, minor repairs, and performance of scheduled services at the operator, crew, company, and battalion/task force levels. ART 6.2.1 includes the performance of daily checks and the performance of scheduled services. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit conducts PMCS IAW standards established in technical manuals for its equipment.
02	Time	Of average equipment downtime.
03	Time	Of turnaround time for repair of priority combat equipment.
04	Percent	Of PMCS tasks completed.
05	Percent	Of PMCS tasks deferred.
06	Percent	Of equipment operationally ready.
07	Number	Of PMCS tasks.
08	Number	Of PMCS tasks deferred.
09	Number	Of PMCS tasks completed.

ART 6.2.2 RECOVER/EVACUATE DISABLED EQUIPMENT

6-35. Obtain damaged, discarded, condemned, or abandoned allied or enemy materiel (ground, aircraft, and marine). ART 6.2.2 includes the method, techniques, and procedures for recovering and evacuating disabled equipment. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	The recovery and evacuation of disabled equipment contributes to the maintenance of unit combat power.
02	Time	To refine salvage/recovery plans after receipt of warning order.

No.	Scale	Measure
03	Percent	Of friendly damaged equipment recovered.
04	Percent	Of damaged/abandoned material left on the battlefield due to failure to timely report.
05	Percent	Of enemy abandoned equipment recovered.
06	Number	Of instances when unit operations are degraded, delayed, or modified due to ongoing recovery operations.

ART 6.2.3 DIAGNOSE EQUIPMENT FAULTS

6-36. Identify malfunctions through the use of on-board sensors, external test equipment, and visual inspections. ART 6.2.3 includes fault isolation/ troubleshooting, battle damage/accident assessment, and differentiating between parts needing repair/replacement and serviceable parts/equipment. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit correctly identifies equipment malfunctions/assesses equipment battle damage.
02	Time	To diagnose malfunctioning equipment.
03	Time	To complete diagnosis, troubleshoot, and determine repair parts requirements for faulty equipment.
04	Percent	Of equipment faults correctly diagnosed.
05	Percent	Of malfunctioning equipment deadlined with misdiagnosis.
06	Number	Of instances when unit operations are degraded, delayed, or modified due to lack of skilled mechanics and diagnostic equipment.

ART 6.2.4 SUBSTITUTE PARTS

6-37. Remove serviceable parts, components, and assemblies from unserviceable, economically repairable equipment, or from materiel authorized for disposal. Immediately reuse it in restoring a like item to a combat-operable or serviceable condition. ART 6.2.4 includes controlled exchange of parts and cannibalization. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit substitution policy increases the unit's available combat power.
02	Time	To refine substitution policy after receipt of warning order.
03	Time	To diagnose, determine subsystem availability, and perform substitution to return major combat equipment to service.
04	Percent	Of equipment unavailable due to substitution/cannibalization.
05	Percent	Of substitutions completed through use of salvage/disposal materiel.
06	Percent	Of substitutions completed through use of authorized cannibalization within unit.

ART 6.2.5 EXCHANGE PARTS

6-38. Issue serviceable materiel in direct exchange for unserviceable materiel on an item-for-item basis. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit exchange policy does not degrade unit readiness.
02	Time	To refine direct exchange policy after receipt of warning order.
03	Time	To diagnose, determine direct exchange availability, and perform the exchange to return major combat equipment to service.
04	Time	Of average downtime for deadlined equipment using the direct exchange pipeline.
05	Percent	Of deadlined equipment returned to service through direct exchange.
06	Percent	Of direct exchanges unsuccessful due to faulty record keeping.

ART 6.2.6 REPAIR EQUIPMENT

6-39. Restore an item to serviceable condition through correction of a specific failure or unserviceable condition. These items include tactical and combat vehicles, aircraft, marine equipment, and command and control systems. ART 6.2.6 includes testing/checking equipment, adjusting, aligning, and repairing components and assemblies, repairing and modifying defective end items, replacing components and assemblies, removing/replacing piece parts, and marking/painting equipment. ART 6.2.6 also includes systems calibration, installation of modification work orders, and preventative replacement of parts before they can fail. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	The time necessary to repair unit equipment does not take more than five percent longer than the sum of time necessary to recover the equipment to a maintenance site, diagnose equipment faults, order, obtain, and install replacement parts, and test/check repaired equipment.
02	Time	To obtain replacement parts.
03	Time	To repair equipment.
04	Time	Of average equipment downtime.
05	Time	Of turnaround time for repair and return of critical combat equipment.
06	Time	To determine reason why equipment is malfunctioning.
07	Percent	Of equipment faults diagnosed correctly.
08	Percent	Of average equipment downtime.
09	Percent	Of TPFDD maintenance units deployed and operational.
10	Percent	Of equipment deadlined for maintenance.
11	Percent	Of equipment deadlined for supply.
12	Percent	Of equipment failures successfully repaired.
13	Percent	Of damaged equipment salvaged.
14	Percent	Of maintenance capability provided by host nation.
15	Percent	Of unit maintenance capability diverted toward providing local security.

ART 6.2.7 RETURN REPAIRED EQUIPMENT TO THE USER

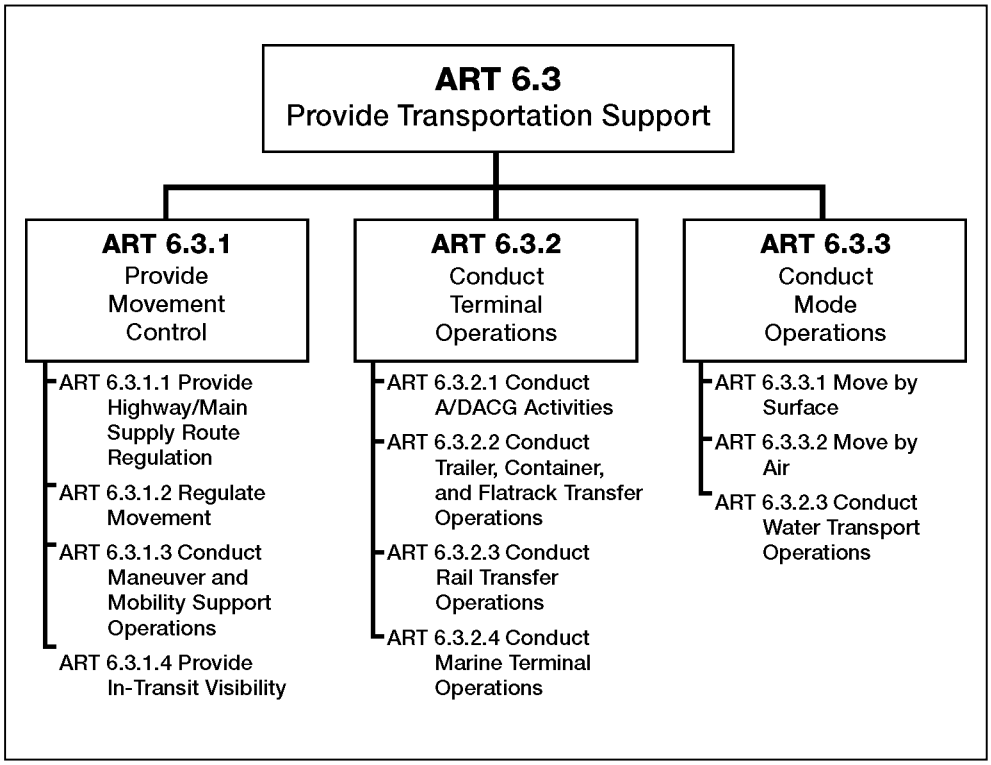
6-40. Return equipment to the battle or supply system. ART 6.2.7 includes providing operationally ready items to supply stream, or float and repaired equipment to units. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	Repaired equipment is returned to the user in a timely manner based on the situation.
02	Time	To obtain replacement parts.
03	Time	To repair and return equipment.
04	Time	Of average equipment downtime.
05	Time	Of turnaround time for repair and return of critical combat equipment.
06	Percent	Of average equipment downtime.
07	Percent	Of TPFDD maintenance units deployed and operational.
08	Percent	Of equipment deadlined for maintenance.
09	Percent	Of equipment deadlined for supply.
10	Percent	Of equipment failures successfully repaired.
11	Percent	Of damaged equipment salvaged.
12	Percent	Of maintenance capability provided by host nation.

ART 6.2.8 PROVIDE MAINTENANCE MANAGEMENT

6-41. Coordinate maintenance operations among the various activities and maintain maintenance/equipment records. (FM 4-30.3) (CASCOM)

No.	Scale	Measure
01	Yes/No	The procedures to provide maintenance management are successful in maintaining unit combat power.
02	Time	To obtain replacement parts.
03	Time	To repair equipment.
04	Time	To refine the concept and policies for equipment repair, maintenance, and evacuation, and provide for establishment of maintenance facilities, after receipt of warning order.
05	Time	Of average equipment downtime.
06	Time	Of turnaround time for repair and return of critical combat equipment.
07	Percent	Of average equipment downtime.
08	Percent	Of TPFDD maintenance units deployed and operational.
09	Percent	Of equipment deadlined for maintenance.
10	Percent	Of equipment deadlined for supply.
11	Percent	Of equipment failures successfully repaired.
12	Percent	Of damaged equipment salvaged.
13	Percent	Of maintenance capability provided by host nation.
14	Percent	Of rear area maintenance facilities secure.
15	Percent	Of operations degraded, delayed, or modified due to faulty maintenance management.
16	Percent	Of operations orders that address the collection, classification, and disposition of enemy material.
17	Percent	Of captured enemy material collected, classified, and disposed of IAW instructions from appropriate material management center.



SECTION III – ART 6.3: PROVIDE TRANSPORTATION SUPPORT

6-42. Move and transfer equipment, materiel, or personnel by towing, self-propulsion, or any means of carrier: such as, railways, highways, waterways, oceans, Joint Logistics Over-the-Shore (JLOTS), and airways. ART 6.3 includes technical operations, and moving, evacuating, and transfer of cargo, personnel, and equipment between transportation modes. (FM 55-1) (CASCOM)

No.	*Scale*	*Measure*
01	Yes/No	Lack of transportation support does not delay, degrade, cause the modification of, or cancel unit operations.
02	Time	To refine transportation plan for AO after receipt of warning order.
03	Time	To establish a comprehensive movement plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.
05	Time	Operations delayed due to late arrivals of personnel and/or equipment.
06	Percent	Difference between transportation plan and actual requirements in AO.
07	Percent	Of planned movement services support achieved in AO.
08	Percent	Allowable cabin load filled for AO lift sorties (not including staging and backload).
09	Percent	Of airfields with material handling equipment.
10	Percent	Of airlift sorties (not including staging and backhaul) flying at 90 percent allowable cabin load or better.
11	Percent	Of landing zones with material handling equipment.
12	Percent	Of scheduled transport movements accomplished on schedule.

No.	Scale	Measure
13	Percent	Of fire support delayed or canceled due to ammunition shortfall.
14	Percent	Of supplies moved to correct destination.
15	Percent	Of supplies lost or destroyed en route to destination in AO.
16	Number	Of passengers transported in AO per day in support of operations.
17	Number	Of ton-miles of supplies and equipment transported per day in AO.

ART 6.3.1 PROVIDE MOVEMENT CONTROL

6-43. Plan, route, schedule, control, coordinate, and provide in-transit visibility of personnel, units, equipment, and supplies moving via all modes of transportation (less pipeline) over air and surface lines of communication. (FM 55-10) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures established to provide movement control within the AO do not delay, degrade, cause the modification of, or cancel unit operations.
02	Time	To refine movement plan for AO after receipt of warning order.
03	Time	To establish comprehensive movement control plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.
05	Time	Operations are delayed due to late arrivals of personnel and/or equipment.
06	Time	To identify location of personnel/equipment in transit.
07	Percent	Difference between movement plan requirements and actual requirements in AO.
08	Percent	Of planned movement control support achieved in AO.
09	Percent	Of scheduled transport movements accomplished on schedule.
10	Percent	Of accurate position reports.
11	Number	Of passengers transported per day in AO in support of operations.
12	Number	Of ton-miles of supplies and equipment transported per day in AO.

ART 6.3.1.1 PROVIDE HIGHWAY/MAIN SUPPLY ROUTE REGULATION

6-44. Plan, route, schedule, and deconflict the use of highways and main supply routes (MSRs) to facilitate movement control. Highway regulation is synchronized with unit movement and maneuver. (FM 55-10) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures established to provide highway/MSR regulation within the AO do not delay, degrade, cause the modification of, or cancel unit operations.
02	Time	To refine highway/MSR regulation plan for AO after receipt of warning order.
03	Time	To establish, publish, and distribute a comprehensive highway/MSR regulation plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.

No.	Scale	Measure
05	Time	Delay in highway/MSR movements due to late arrivals of personnel and/or equipment.
06	Time	To identify location of personnel/equipment in transit.
07	Percent	Difference between highway/MSR regulation plan requirements and actual requirements in AO.
08	Percent	Of planned highway/MSR regulation support achieved in AO.
09	Percent	Of scheduled highway/MSR movements that must be deconflicted.
10	Percent	Of accurate position reports.
11	Number	Of highway regulation teams available within the AO.

ART 6.3.1.2 REGULATE MOVEMENT

6-45. Identify critical points where restrictions could slow down or stop movement. Critical points are facilities, terminals, ports, railheads, and cargo transfer points that, if congested, will limit the efficiency and effectiveness of the entire transportation network. (FM 55-10) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to regulate movement within the AO do not delay, degrade, cause the modification of, or cancel unit operations.
02	Time	To refine movement program for AO after receipt of warning order.
03	Time	To establish comprehensive port clearance plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.
05	Time	Delay in operations due to critical chokepoint clearance.
06	Time	To identify location of personnel/equipment in transit.
07	Percent	Difference between movement program requirements and actual requirements in AO.
08	Percent	Of planned port clearance (air and sea) achieved in AO.
09	Percent	Of scheduled transport movements accomplished on schedule.
10	Percent	Of accurate position reports.
11	Number	Of critical points identified.

ART 6.3.1.3 CONDUCT MANEUVER AND MOBILITY SUPPORT OPERATIONS

6-46. Control movement with a traffic circulation plan that addresses the use of MSRs (names, direction of travel, size and weight restrictions), checkpoints, rest and refuel areas, traffic control points, highway regulation points, and mobile patrols. It reflects any restrictive route features, such as direction of travel or size and weight restrictions, and critical points. ART 6.3.1.3 includes providing route signs and installing radio frequency interrogators at critical points to capture radio frequency tag data and report the data to in-transit visibility servers. (FM 55-10) (CASCOM)

No.	Scale	Measure
01	Yes/No	Maneuver and mobility support operations enhance the capabilities of units within the AO to accomplish assigned missions.
02	Time	To refine traffic circulation plan for AO after receipt of warning order.

No.	Scale	Measure
03	Time	To establish checkpoints, rest areas, refuel points, traffic control points, and highway regulation points to support the operation.
04	Time	To identify the location of personnel/equipment in transit.
05	Time	To produce and post route control signage.
06	Percent	Difference between traffic circulation plan requirements and actual requirements in AO.
07	Percent	Of routes classified (weight and size restrictions) in AO.
08	Percent	Of secured routes achieved in AO.
09	Percent	Of scheduled transport movements accomplished on schedule.
10	Percent	Of accurate position reports.
11	Number	Of radio frequency interrogators employed in AO.

ART 6.3.1.4 PROVIDE IN-TRANSIT VISIBILITY

6-47. Provide ITV by continuously updating the location of units, equipment, personnel, and supplies as they travel throughout the transportation and distribution system. Provide commanders with critical information and allow for shipment diversion based on changing battlefield priorities. (FM 55-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Unit maintains ITV over personnel, equipment, and supplies moving throughout the AO.
02	Time	To refine plan for AO to identify en route locations for radio-frequency identification (RFID) tag readers/interrogators.
03	Time	For satellite transponder location information relating to convoy movements to be reported to the appropriate regional in-transit visibility server.
04	Time	To establish fixed or mobile RFID tag readers/interrogators at highway and rail arrival gates, barge arrival gates, and airfields per theater ITV plan.
05	Time	To establish the RFID system and RFID readers/interrogators set to collect tag data.
06	Time	For the theater support command to assign support element responsibility to manage collection activities at designated interrogation locations.
07	Time	To pass unit cargo movement data to the global transportation network via TC-AIMS II.
08	Time	To scan smart cards for all deploying soldiers at designated integration locations and to pass them to the global transportation network.
09	Time	To establish procedures to remove and properly dispose of RFID tags and satellite transponders.
10	Percent	Of en route location RFID tag readers/interrogators effectively repaired by support element.
11	Percent	Of RFID tagged unit equipment, vehicles, 463L pallets, and containers that are read/interrogated and the data automatically reported to the appropriate regional ITV server.
12	Percent	Of RFID tags and smart card data that are complete and accurate.

No.	Scale	Measure
13	Number	Of designated support elements that scan MSL and smart cards at designated locations.

ART 6.3.2 CONDUCT TERMINAL OPERATIONS

6-48. Provide an area or facility at which cargo, unit equipment, or personnel are loaded, unloaded, or handled in transit or transferred/reconfigured to another mode of transportation. ART 6.3.2 includes the preparation and reading of radio frequency tags to capture in-transit visibility and document inbound and outbound cargo movements. (FM 55-60) (CASCOM)

No.	Scale	Measure
01	Yes/No	Terminal operations within the AO do not delay, disrupt, cause the modification of, or eliminate unit COA.
02	Time	To refine theater distribution plan after receipt of warning order.
03	Time	To establish comprehensive terminal operations plan after theater operations order execution date.
04	Time	To begin movement control operations.
05	Percent	Difference between the theater distribution plan requirements and actual requirements.
06	Percent	Of planned terminal operations achieved in AO.
07	Percent	Of scheduled transport movements accomplished on schedule.
08	Percent	Of terminal capacity utilized in theater per day.
09	Percent	Of required terminal capacity provided by host nation.
10	Percent	Of ITV transactions expected and actual.
11	Number	Of passengers processed per day through terminals in theater.
12	Number	Of terminals operating in theater at activation.
13	Number	Of tons of supplies and equipment handled per day in theater terminals.
14	Number	Of terminals with active ITV RFID capability installed.
15	Number	Of ITV RFID transactions transmitted.

ART 6.3.2.1 CONDUCT ARRIVAL/DEPARTURE AIRFIELD CONTROL GROUP ACTIVITIES

6-49. Coordinate, control, outload, and offload units and their equipment by air for deployment and redeployment. ART 6.3.2.1 requires marshaling of transported units, airfield reception, outloading procedures, and receiving and disposing of forces at the offload airfield. This task is the responsibility of the transported unit, its parent organization or installation, the A/DACG and the Air Force tanker airlift control element mission support team. ART 6.3.2.1 includes the movement of sustainment cargo through the airfield and coordination for the transfer of the cargo to another mode of transportation. (FM 55-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	A/DACG activities do not delay the unit's movement through the aerial port of embarkation/aerial port of debarkation (APOE/APOD) beyond the time to prepare equipment/personnel for movement or reconfigure equipment for operations after movement.
02	Time	To establish A/DACG program for AO after receipt of warning order.
03	Time	To activate A/DACG on receipt of requirement in the AO.
04	Time	To provide requested MHE and logistic support to A/DACG.
05	Percent	Difference between outload/offload requirements planned and actual requirements in AO.
06	Percent	Of planned arrivals/departures achieved on schedule in AO.
07	Percent	Of scheduled passengers, unit equipment, and supplies moved on schedule.
08	Number	Of tons of supplies and equipment handled by A/DACG per day.
09	Number	Of passengers per day processed through A/DACG.

ART 6.3.2.2 CONDUCT TRAILER, CONTAINER, AND FLATRACK TRANSFER OPERATIONS

6-50. Establish and operate a trailer, container, and flatrack transfer point for exchanging transportation platforms for line haul trucks operating over adjoining segments of a line haul route or in support of a distribution hub. ART 6.3.2.2 includes controlling and reporting equipment engaged in transfer operations. (FM 55-60) (CASCOM)

No.	Scale	Measure
01	Yes/No	Trailer, container, and flatrack transfer operations do not delay, restrict, modify or cancel unit operations and mission accomplishment.
02	Time	To refine theater distribution plan after receipt of warning order.
03	Time	To establish operational transfer points.
04	Percent	Of planned capability utilized.
05	Percent	Of ITV transactions expected and actual.
06	Percent	Of documentation errors corrected (digital and hard copy).
07	Number	Of trailers, containers, and flatracks processed through transfer point.
08	Number	Of trailers, containers, and flatracks stranded at transfer point.
09	Number	Of tons of supplies and material transferred at transfer point per day.
10	Number	Of unserviceable en route RFID tag readers/interrogators effectively repaired by support element.
11	Number	Of transfer points with active ITV RFID capability installed.
12	Number	Of maintenance/repair actions completed at transfer points.

ART 6.3.2.3 CONDUCT RAIL TRANSFER OPERATIONS

6-51. Coordinate, control, upload, and offload equipment by rail for deployment and redeployment. ART 6.3.2.3 requires marshaling of equipment, railhead reception, outloading procedures, and receiving and disposing of equipment at the offload railhead. ART 6.3.2.3 includes using rail for the movement of sustainment supplies and materiels, and the

operation and maintenance of railway facilities, locomotives, and rolling stock. (FM 55-20) (CASCOM)

No.	Scale	Measure
01	Yes/No	Delays in moving or handling of personnel, supplies, and equipment by rail degrade, delay or modify unit operations.
02	Time	To refine theater distribution plan for AO after receipt of warning order.
03	Time	To establish comprehensive rail movement plan on activation of AO.
04	Percent	Difference between the theater distribution plan requirements and actual requirements in AO.
05	Percent	Of planned rail movements achieved in AO.
06	Percent	Of scheduled rail transport movements accomplished on schedule.
07	Percent	Of surface cargo in AO transported by railroad.
08	Percent	Of passengers stranded in transit for more than one day.
09	Percent	Of personnel, supplies, and equipment in AO that arrive at their destination on schedule.
10	Percent	Of operation degraded, delayed, or modified due to delays in moving or handling of personnel, supplies, and equipment.
11	Percent	Of rail transport capacity in AO utilized per day.
12	Percent	Of required rail transport provided by host nation.
13	Percent	Of available rail network double tracked.
14	Percent	Of rolling stock operational.
15	Number	Of tons per day of supplies and equipment loaded at railheads.
16	Number	Of tons per day of supplies and equipment unloaded at railheads.
17	Number	Of passengers per day moved by rail transport.
18	Number	Of flatcars for oversized cargo.
19	Number	Of miles per day that can be repaired or upgraded.

ART 6.3.2.4 CONDUCT MARINE TERMINAL OPERATIONS

6-52. Provide for loading, offloading, and in-transit handling of cargo and personnel at a seaport of embarkation and debarkation. ART 6.3.2.4 includes the transfer of cargo, equipment, and personnel from a marine terminal to another mode of ground or air transportation to facilitate onward movement and sustainment operations. Marine terminals are classified as fixed port facilities, unimproved port facilities, or bare beach port facilities. (FM 55-60) (CASCOM)

No.	Scale	Measure
01	Yes/No	Delays in moving or handling of personnel, supplies, and equipment degrade, delay or modify unit operations.
02	Time	To refine marine terminal service program for AO after receipt of warning order.
03	Time	To establish comprehensive marine terminal services plan on activation of the AO.
04	Time	For AO terminals to begin operation on activation of AO.

No.	Scale	Measure
05	Percent	Difference between planned marine terminal service plan and actual requirements in AO.
06	Percent	Of planned marine terminal services support achieved in AO.
07	Percent	Of scheduled transport movements accomplished on schedule.
08	Percent	Of marine terminal capacity in AO utilized per day.
09	Percent	Of required marine terminal capacity provided by host nation.
10	Percent	Of operations degraded, delayed, or modified due to delays in loading, unloading or handling of personnel, supplies, and equipment at a marine terminal.
11	Number	Of tons per day of supplies and equipment handled at marine terminals.
12	Number	Of tons per day of supplies and equipment held in storage at marine terminals.
13	Number	Of tons per day of supplies and equipment handled in intermodal operations in AO on average.
14	Number	Of passengers per day vectored through marine terminals in AO.
15	Number	Of marine terminals operating in AO at activation.

ART 6.3.3 CONDUCT MODE OPERATIONS

6-53. Physically move supplies, unit equipment, individuals, and materiel on a transportation conveyance by a transportation mode or by unit means (individuals or unit organic means). ART 6.3.3 includes the relocation of ammunition supply/transfer points, supply support activities, and tactical JLOTS in support of the AO and mode operations. Operations include all modes of transportation and the use of military, contracted, and commercial transportation assets. (FM 55-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Delays in mode operations degrade, delay or modify unit operations.
02	Time	To refine theater distribution plan for AO after receipt of warning order.
03	Time	To establish comprehensive movement support plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.
05	Percent	Difference between the theater distribution plan requirements and actual requirements in AO.
06	Percent	Of planned movement services support achieved in AO.
07	Percent	Of scheduled transport movements accomplished on schedule.
08	Percent	Of operations degraded, delayed, or modified due to delays in moving or evacuating personnel, supplies, and equipment.
09	Percent	Of personnel, supplies, and equipment in AO that arrive on schedule.
10	Percent	Of passengers stranded in transit for more than one day.
11	Percent	Of movement capacity in AO utilized per day.
12	Percent	Of required transport services provided by host nation.
13	Number	Of tons per day of supplies and equipment moved by transport means in AO.

No.	Scale	Measure
14	Number	Of tons per day of supplies and equipment in AO moved by organic units.
15	Number	Of passengers per day transported in AO.

ART 6.3.3.1 MOVE BY SURFACE

6-54. Transport cargo, equipment, and personnel by waterways, railroads, highways, or other means, such as organic transportation. ART 6.3.3.1 includes the conduct of logistic convoys. (FM 55-30) (CASCOM)

No.	Scale	Measure
01	Yes/No	Delays in surface transportation do not degrade, delay or modify unit operations.
02	Time	To refine theater distribution plan for AO after receipt of warning order.
03	Time	To establish comprehensive surface movement plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.
05	Percent	Difference between planned theater distribution requirements and actual requirements in AO.
06	Percent	Of planned surface transport support achieved in AO.
07	Percent	Of scheduled surface transport movements accomplished on schedule.
08	Percent	Of operations degraded, delayed, or modified due to delays in moving or evacuating personnel, supplies, and equipment.
09	Percent	Of surface cargo in AO transported by waterways.
10	Percent	Of surface cargo in AO transported by railroad.
11	Percent	Of bulk fuel in AO transported by pipeline.
12	Percent	Of surface cargo in AO transported by wheeled/tracked vehicles.
13	Percent	Of personnel, supplies, and equipment in AO that arrive at their destination on schedule.
14	Percent	Of passengers stranded in transit for more than one day.
15	Percent	Of surface transport capacity in AO utilized per day.
16	Percent	Of required surface transport provided by host nation.
17	Number	Of tons per day of supplies and equipment moved by surface transport in AO.
18	Number	Of tons per day of supplies and equipment in AO moved by organic units.
19	Number	Of passengers per day transported by surface means in AO.

ART 6.3.3.2 MOVE BY AIR

6-55. Transport personnel, cargo, and equipment by aircraft. These assets include military, contracted, and commercial as well as strategic and theater fixed-wing airlift. ART 6.3.3.2 also includes the use of rotary-wing and Army operational support fixed-wing airlift as transportation platforms to move personnel, equipment, and sustainment supplies. (FM 55-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Delays in air transportation do not degrade, delay or modify unit operations.

No.	Scale	Measure
02	Time	To refine theater distribution plan for AO after receipt of warning order.
03	Time	To establish comprehensive air movement plan on activation of the AO.
04	Time	For AO movement center to begin operation on activation of AO.
05	Percent	Difference between planned theater distribution requirements and actual requirements in AO.
06	Percent	Of planned air transport support achieved in AO.
07	Percent	Of scheduled air transport movements accomplished on schedule.
08	Percent	Of operations degraded, delayed, or modified due to delays in moving or evacuating personnel, supplies, and equipment.
09	Percent	Of personnel, supplies, and equipment in AO that arrive at destination on schedule.
10	Percent	Of cargo in AO moved by air transport.
11	Percent	Of passengers stranded in transit for more than one day.
12	Percent	Of air transport capacity in AO utilized per day.
13	Percent	Of required air transport provided by host nation.
14	Number	Of tons per day of supplies and equipment moved by air transport in AO.
15	Number	Of tons per day of supplies and equipment in AO moved by organic aviation units.
16	Number	Of passengers per day moved by air transport in AO.

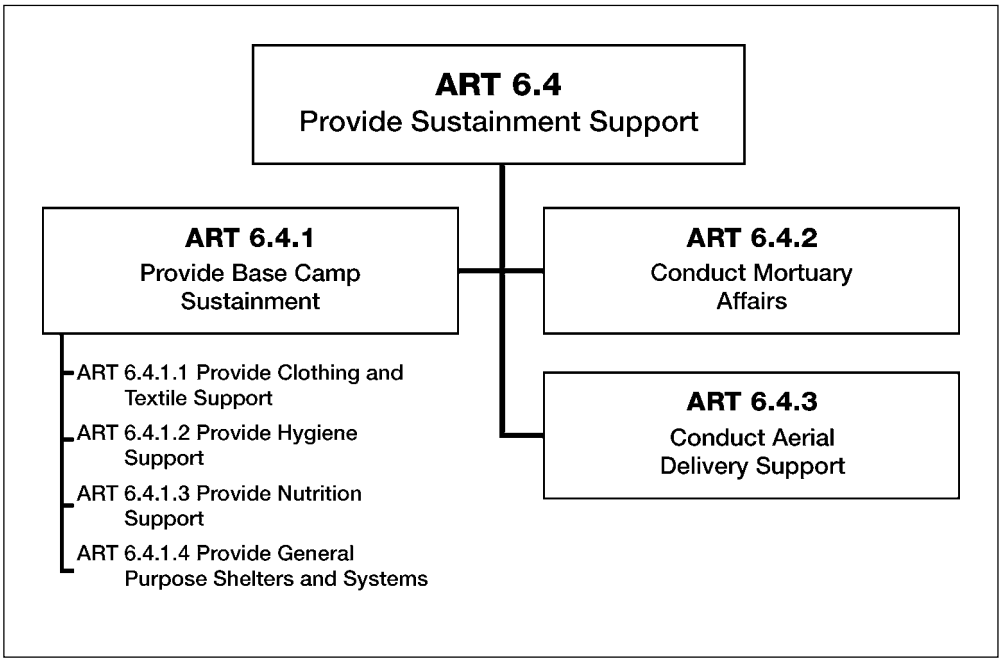
ART 6.3.3.3 CONDUCT WATER TRANSPORT OPERATIONS

6-56. Provide for the movement of unit personnel, equipment, and sustainment cargo through and between Army water terminals. Water transport operations are conducted at established ocean and river ports, beach sites and inland waterways. They are an integral part of inland waterway and shore-to-shore operations. Tasks include offshore ship discharge; inland waterway; and shore-to-shore operations for logistic purposes, to include logistics over-the-shore. (FM 55-60) (CASCOM)

Note: Amphibious operations as a task are addressed in ART 8.1.5.1.3 (Conduct an Amphibious Assault into an AO).

No.	Scale	Measure
01	Yes/No	Delays in water transportation do not degrade, delay or modify unit operations.
02	Time	To refine theater distribution plan for AO after receipt of warning order.
03	Time	To establish comprehensive water transport movement plan on activation of AO.
04	Percent	Difference between planned theater distribution requirements and actual requirements in AO.
05	Percent	Of planned water transport movements achieved in AO.
06	Percent	Of scheduled water transport movements accomplished on schedule.
07	Percent	Of surface cargo in AO transported via waterways.
08	Percent	Of passengers stranded in transit for more than one day.

No.	Scale	Measure
09	Percent	Of personnel, supplies, and equipment in AO that arrive on schedule.
10	Percent	Of operation degraded, delayed, or modified due to delays in moving or handling of personnel, supplies, and equipment.
11	Percent	Of water transport capacity in AO utilized per day.
12	Percent	Of required water transport provided by host nation.
13	Number	Of tons per day of supplies and equipment moved by water transport.
14	Number	Of tons per day of supplies and equipment moved by organic units.
15	Number	Of passengers per day moved by water transport.



SECTION IV – ART 6.4: PROVIDE SUSTAINMENT SUPPORT

6-57. Providing sustainment support to soldiers involves providing base camp sustainment, mortuary affairs, and aerial delivery services to soldiers and their units. The commander determines the priorities for sustainment support. (FM 100-10) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to provide sustainment support do not negatively impact on supported units' ability to perform missions.
02	Time	To refine sustainment support program for AO after receipt of warning order.
03	Time	To coordinate hygiene operations with medical authorities in AO.
04	Time	To estimate nonmateriel sustainment support requirements for military, DOD civilian, qualifying contractor, and other personnel in AO.
05	Time	To rig equipment or supplies for airdrop in AO.

No.	Scale	Measure
06	Time	To establish base camp support requirements for military, DOD civilians, qualifying contractor, and other personnel in AO.
07	Time	To determine engineer requirements to establish and maintain base camp and facilities.
08	Time	Between access to hygiene facilities for personnel in AO, on average.
09	Time	To establish AO rest and recuperation policy after receipt of warning order.
10	Time	To establish rest and recuperation facilities in projected AO.
11	Time	To update sustainment support requirements based on changes to AO population.
12	Time	To coordinate mortuary affairs policy and procedures with the joint mortuary affairs office.
13	Percent	Difference between projected sustainment support requirements and actual requirements in AO.
14	Percent	Of planned hygiene capacity achieved in AO.
15	Percent	Of required production rate of potable water achieved in AO.
16	Percent	Of operations include establishment of mortuary collection points, field processing centers, personal effects depots, and US cemeteries in AO.
17	Percent	Of personal daily water requirements provided in AO.
18	Percent	Of personnel with required individual clothing and equipment.
19	Percent	Of personnel receiving at least one hot meal a day.

ART 6.4.1 PROVIDE BASE CAMP SUSTAINMENT

6-58. Provide base camp sustainment facilities and services to soldiers and other authorized personnel conducting full spectrum operations. Provision of this support to authorized individuals and units occurs regardless of their physical location within or external to a base, facility, installation, camp, or station. ART 6.4.1 includes the provision of clothing and textile repair support, hygiene services (shower, laundry, and latrine support), nutrition support, and general purpose shelters and systems. (FM 42-424)) (CASCOM)

Notes:

ART 6.1.11.1 (Purify Water) addresses water purification support.

ART 6.10.3 (Provide Engineer Construction Support) addresses construction, repairing, maintenance, and operations of permanent and semipermanent water facilities, such as the drilling of water wells.

ART 6.10.5 (Provide Facilities Engineer Support) addresses waste management, the acquisition, management, and disposal of real estate, fire fighting support, and the construction, management, and maintenance of bases and installations.

No.	Scale	Measure
01	Yes/No	Procedures to provide base camp sustainment do not negatively impact on supported units' ability to perform missions.

No.	Scale	Measure
02	Time	To refine base camp sustainment program for AO after receipt of warning order.
03	Percent	Difference between projected base camp sustainment requirements and actual requirements in AO.
04	Percent	Of planned base camp sustainment capacity achieved in AO.
05	Percent	Of operations degraded, delayed, or modified due to lack of adequate base camp sustainment.
06	Percent	Of base camp sustainment requirements that can be performed by host nation, third nation, and/or contractor support personnel.
07	Number	And types of base camp sustainment facilities available in AO.

ART 6.4.1.1 PROVIDE CLOTHING AND TEXTILE REPAIR SUPPORT

6-59. Provide clean, serviceable clothing; restore clothing or light textiles; and provide clothing exchange. ART 6.4.1 includes collecting repairable clothing and textiles. (FM 10-16) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to provide clothing and textile repair services do not negatively impact on supported units' ability to perform missions.
02	Time	To refine field services program for AO after receipt of warning order.
03	Time	To coordinate clothing and textile repair operations in AO.
04	Time	To repair clothing/textiles in AO, on average.
05	Percent	Difference between projected sustainment field service requirements and actual requirements in AO.
06	Percent	Of planned capacity of field service clothing and textile repair achieved in AO.
07	Percent	Of required production rate of clothing and textile repair achieved in AO.
08	Percent	Of required production rate of clothing and textile repair that can be provided by host-nation/contract sources.
09	Number	Of clothing and textile repair units in AO.
10	Number	Of tons per month of clothing and textile repaired in AO facilities.
11	Number	Of tons per month of clothing and textiles out of service for renovation/repair.

ART 6.4.1.2 PROVIDE HYGIENE SUPPORT

6-60. Provide hygiene services—showers, laundries, and latrines. ART 6.4.3 includes obtaining the fresh water and cleaning materials necessary to provide these services. It also includes preparing the shelters and drainage necessary to perform these services in addition to operating shower and delousing units, laundering clothing, and reimpregnating clothing. (FM 42-414). (CASCOM)

Notes:

ART 6.1.1 (Provide Subsistence (Class I) addresses the provision of health and comfort packages containing personnel care items, such as disposable

razors and sanitary napkins, necessary for personnel hygiene when AAFES tactical field exchanges are not operational.

ART 6.1.11.1 (Purify Water) addresses water purification support.

ART 6.10.3 (Provide Engineer Construction Support) addresses construction, repairing, maintenance, and operations of permanent and semipermanent water facilities, such as the drilling of water wells.

ART 6.10.5.1 (Provide Waste Management) addresses waste management, to include wastewater collection and treatment, refuse collection and disposal.

No.	Scale	Measure
01	Yes/No	Procedures to provide hygiene support do not negatively impact on supported units' ability to perform missions.
02	Yes/No	Procedures to provide hygiene support do not favor combat support and CSS units over ground maneuver units.
03	Time	To refine hygiene support program for AO after receipt of warning order.
04	Time	To coordinate hygiene support operations with medical authorities in AO.
05	Time	To establish hygiene (shower, laundry, and latrine) facilities for personnel in AO.
06	Percent	Difference between projected hygiene support requirements and actual requirements in AO.
07	Percent	Of planned hygiene support capacity achieved in AO.
08	Percent	Of required production rate of potable water achieved in AO.
09	Percent	Of personal daily water requirements provided in AO.
10	Percent	Of required hygiene support (shower, laundry, and latrine) equipment and materiel available in AO.
11	Percent	Of available water sources in AO cleared by medical authorities for use in hygiene support.
12	Percent	Of required hygiene support (shower, laundry, and latrine) requirements that can be provided by host-nation, third-nation, or contractors.
13	Number	And capabilities of laundry and shower units and latrine providers available in AO.

ART 6.4.1.3 PROVIDE NUTRITION SUPPORT

6-61. Provide nutrition support to soldiers at all echelons. ART 6.4.1.3 includes obtaining rations, preparing rations, serving prepared rations, performing in-field kitchen sanitation, operating field kitchens, installation dining facilities, and hospital dining facilities, and preparing products for shipment. This task also includes providing bakery products and nutritional care. (FM 10-23) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to provide nutritional support (food preparation, serving, field kitchen sanitation, and accounting for rations) do not negatively impact on supported units' ability to perform missions.
02	Time	To refine nutrition support program for AO after receipt of warning order.

No.	Scale	Measure
03	Percent	Difference between projected nutrition support requirements and actual requirements in AO.
04	Percent	Of planned capacity for nutrition support achieved in AO.
05	Percent	Of personnel in AO receiving at least one hot meal per day.
06	Percent	Of meals served to non-DOD personnel.
07	Percent	Of personnel in AO receiving three meals per day.
08	Percent	Of field kitchens temporarily closed due to sanitation violations.
09	Percent	Of nutritional support requirements that can be performed by host-nation, third-nation, and/or contractor support personnel.
10	Number	Of hot meals served in AO in a given time period.
11	Number	Of personnel in AO requiring nutritional support in AO.
12	Number	Of days of supply of meals, ready to eat (MRE) available in AO.
13	Number	Of field kitchens available in AO.
14	Number	Of available water sources and platforms in AO.
15	Number	Of nutritional support (food service) personnel in AO.

ART 6.4.1.4 PROVIDE GENERAL PURPOSE SHELTERS AND SYSTEMS

6-62. Provide shelters, heaters, environmental conditioning/control units (ECUs) to provide shelter from the elements for soldiers and units. ART 6.4.1.4 includes providing ECUs, light weight/quick erect shelters, and environmentally safe, light weight heaters. (FM 42-424) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to provide general purpose shelters and systems do not negatively impact on supported units' ability to perform missions.
02	Time	To refine AO program for general purpose shelters and system after receipt of warning order.
03	Percent	Difference between projected shelter and systems requirements and actual requirements in AO.
04	Percent	Of planned shelter and system capacity achieved in AO.
05	Percent	Of operations degraded, delayed, or modified due to lack of applicable general purpose shelters and systems in AO.
06	Percent	Of general purpose shelters and systems erected undamaged.
07	Percent	Of general purpose shelters and systems requirements that can be performed by host-nation, third-nation, and/or contractor support personnel.
08	Number	Of instances of mission delays or failures due to lack of general purpose shelters and systems.
09	Number	And types of general purpose shelters and ECUs available in AO.

ART 6.4.2 CONDUCT MORTUARY AFFAIRS

6-63. Provide for the care and disposition of deceased personnel. ART 6.4.2 includes operating collection points, recovering deceased persons, determining and reporting identities of deceased soldiers, and registering

burial sites. Commanders are responsible for the search, recovery, tentative identification, care, and evacuation of remains to the nearest collection point or mortuary. Remains may or may not be contaminated by NBC agents. (FM 10-64) (CASCOM)

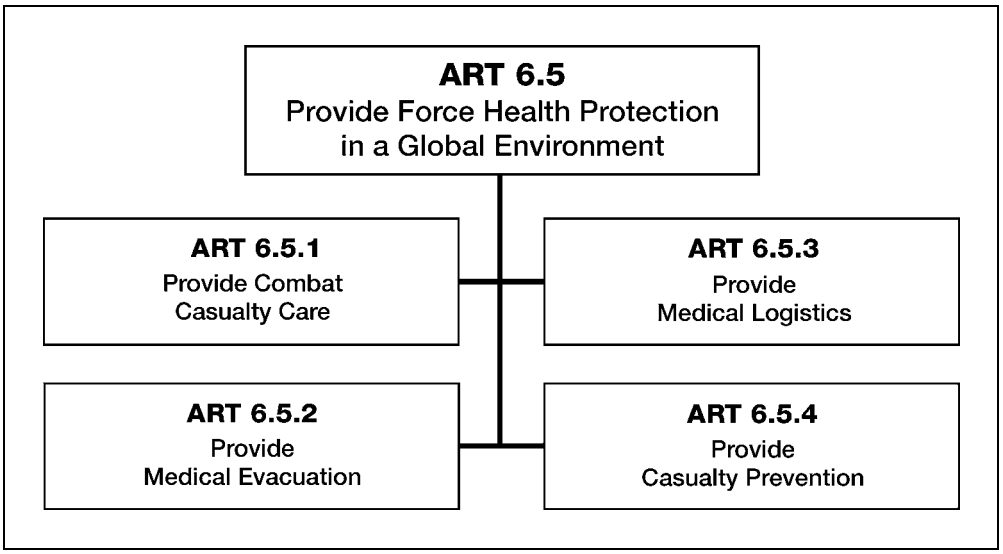
No.	Scale	Measure
01	Yes/No	Mortuary affairs requirements are balanced against mission requirements and unit morale.
02	Yes/No	The remains of every US servicemember who dies within the AO is accounted for and provided mortuary services.
03	Time	To refine field services program for AO after receipt of warning order.
04	Time	To coordinate mortuary affairs policy and procedures with the joint mortuary affairs office.
05	Time	Delay in disposition of remains, on average.
06	Time	To coordinate transportation of remains to CONUS, on average.
07	Time	To establish temporary internment facilities.
08	Time	Delay in identification, care, and evacuation/disposition of remains due to lack of adequate mortuary affairs units.
09	Percent	Difference between projected sustainment field service requirements and actual requirements in AO.
10	Percent	Of operations include establishment of mortuary collection points, field processing centers, personal effects depots, and US cemeteries in AO.
11	Percent	Accuracy in maintaining records of deceased/missing personnel in AO.
12	Percent	Accuracy in maintaining records of personal effects in AO.
13	Percent	Accuracy in processing personal effects of deceased/missing in AO.
14	Percent	Of deceased/missing personnel identification delayed until next of kin notified.
15	Percent	Of deceased/missing personnel identification provided before next of kin notified.
16	Percent	Of remains correctly identified.
17	Percent	Of remains reidentified after disposition.
18	Number	Of remains processed within a given time.

ART 6.4.3 CONDUCT AERIAL DELIVERY SUPPORT

6-64. Provide supplies and equipment by parachute or sling load. ART 6.4.3 includes the provision of aerial delivery equipment and systems, including parachute packing, air item maintenance, external sling load, and rigging supplies and equipment. (FM 10-500-9) (CASCOM)

No.	Scale	Measure
01	Yes/No	Procedures to provide aerial delivery do not negatively impact on supported units' ability to perform missions.
02	Time	To refine field services program for AO after receipt of warning order.
03	Percent	Difference between projected field service requirements and actual requirements in AO.
04	Percent	Of planned capacity of aerial delivery support achieved in AO.

No.	Scale	Measure
05	Percent	Of operations degraded, delayed, or modified due to lack of aerial delivery support and equipment.
06	Percent	Of equipment delivered undamaged.
07	Percent	Of personnel who received injuries during aerial delivery operations.
08	Percent	Of aerial deliveries on time and target.
09	Percent	Of drops in correct landing/drop zone.
10	Percent	Of support equipment available to perform aerial delivery.
11	Percent	Of support missions requiring aerial delivery.
12	Number	Of instances of major combat equipment losses due to improper external rigging.
13	Number	Of aircraft available to perform aerial delivery.
14	Number	Of gallons/pounds of fuel available to support mission.
15	Number	Of acceptable landing/drop zones in AO to support mission.

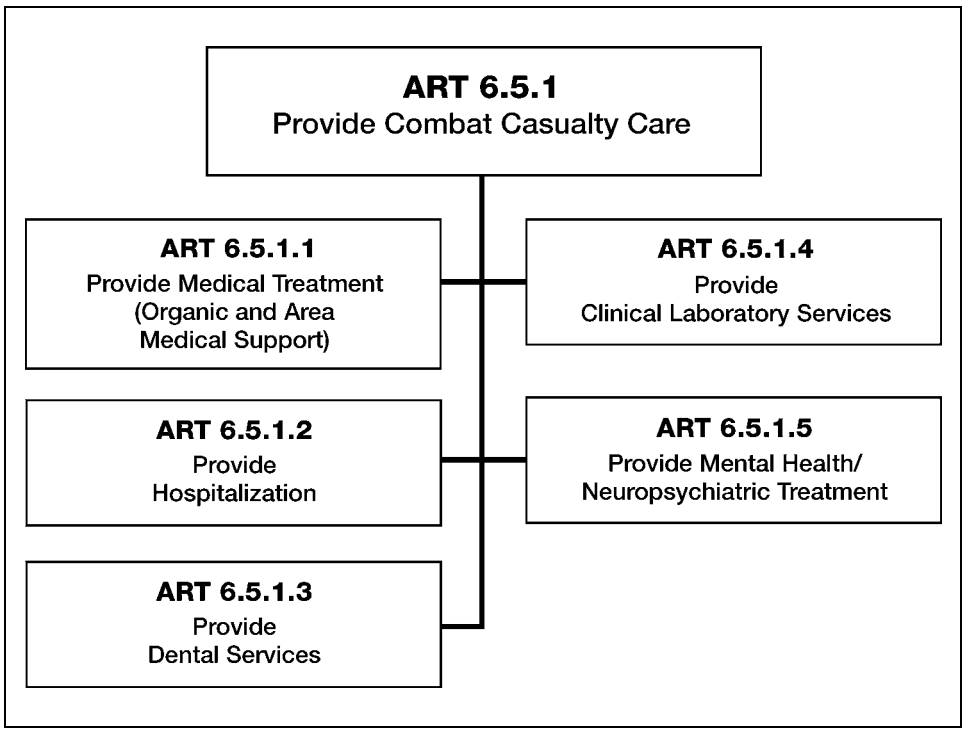


SECTION V – ART 6.5: PROVIDE FORCE HEALTH PROTECTION IN A GLOBAL ENVIRONMENT

6-65. Force health protection in a global environment (FHPGE) is a continuum of care and prevention from predeployment, to deployment, to postdeployment. The FHPGE mission (executed by the health service support [HSS] system) starts with service entry and is focused on maintaining a fit and effective soldier during garrison operations and while deployed. Provision of these services stretches from the forward edge of an operational area through the national level sustaining base medical facilities. The challenge will be to simultaneously provide health care support to deploying forces, provide health care services to the sustaining base, establish an effective HSS system within the theater, and support the potential for lesser conflicts and/or support and sustainment operations. Additionally, post conflict health care support is required for redeployment and demobilization.

Force health protection in a global environment identifies AMEDD required capabilities to support operational warfighting concepts across the operational continuum. (FM 4-02) (USAMEDDC&S).

No.	Scale	Measure
01	Yes/No	Force health protection in a global environment (FHPGE) support provided helps to maintain the command's combat power/strength.
02	Time	To refine FHPGE plans for AO after receipt of warning order.
03	Time	To establish comprehensive FHPGE plan on activation of the AO.
04	Time	To establish liaison between senior AO surgeon and joint force surgeons.
05	Time	To expand medical treatment facilities (MTFs) to full capacity.
06	Time	To coordinate initial activities between AO blood program office and the joint blood program office (JBPO).
07	Percent	Difference between planned FHPGE requirements (combat and DNBI) and actual requirements in the AO.
08	Percent	Of planned capacity of FHPGE support achieved in AO.
09	Percent	Of required patient bed spaces/patient holding cots that are actually available.
10	Percent	Of FHPGE patients in the AO from the active or reserve components.
11	Percent	Of personnel treated/supported from other services (USAF, USN, USMC, USCG).
12	Percent	Of personnel treated/supported from allied, coalition, or host nation forces.
13	Percent	Of enemy prisoners of war (EPW) and/or detained/retained personnel requiring medical treatment/support.
14	Percent	Of total patients treated per day in AO who are DOD civilian employees or contractors, other government agency personnel, host nation or third country civilians, and personnel from international organizations (such as the United Nations), or, when applicable, personnel from nongovern-mental organizations.
15	Percent	Of patients treated in AO who return to duty.
16	Percent	Of patients evacuated from the theater within the stated theater evacuation policy.
17	Percent	Of casualties who are treated at a MTF and subsequently die from their wounds (died of wounds rate).
18	Percent	Of FHPGE personnel or units supporting homeland security operations.



ART 6.5.1 PROVIDE COMBAT CASUALTY CARE

6-66. Casualty care encompasses a number of AMEDD functional areas. It groups organic and area medical support, hospitalization, the treatment aspects of dental care and mental health (MH)/nueropsychiatric (NP) treatment, clinical laboratory services, and the treatment of NBC patients. (FM 4-02) (USAMEDDC&S)

Note: The preventative aspects of dentistry and combat operational stress control (COSC) are addressed under ART 6.5.4, Provide Casualty Prevention.

No.	*Scale*	*Measure*
01	Yes/No	Comprehensive casualty care provided in AO conserves the fighting strength.
02	Percent	Of units supported with organic HSS resources.
03	Percent	Of units supported requiring medical support on an area basis.
04	Percent	Of planned hospitalization resources and actual requirements in the AO.
05	Percent	Of supported forces requiring MH/NP treatment.
06	Percent	Of supported forces requiring dental treatment.
07	Percent	Of patients requiring clinical laboratory support.
08	Percent	Of patients requiring treatment for NBC-related injuries.
09	Yes/No	Trauma specialists are proficient in clinical skills.

ART 6.5.1.1 PROVIDE MEDICAL TREATMENT (ORGANIC AND AREA MEDICAL SUPPORT)

6-67. Provide medical treatment (organic and area support) for all units within the AO. Examine and stabilize patients. Evaluate wounded and disease and nonbattle injuries (DNBI). Examine the general medical status to determine treatment and medical evacuation precedence. (FM 4-02) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Area medical support and treatment meet the unit's health services needs.
02	Yes/No	Organic medical support and treatment meets unit's health service needs.
03	Time	To refine medical treatment (organic and area medical support) program for AO after receipt of warning order.
04	Time	To publish estimates of medical sustainment and anticipated resupply.
05	Time	To expand medical treatment facilities to full capacity.
06	Time	To deploy required additional medical specialists on activation of AO.
07	Percent	Difference between planned medical treatment (organic and area medical support) requirements and actual requirements in AO.
08	Percent	Of planned capacity of medical treatment (organic and area medical support) support achieved in AO.
09	Percent	Of personnel in the AO who are from the active or reserve component.
10	Percent	Of available required patient bed spaces and/or patient holding cots.
11	Percent	Of personnel treated who are from other services (USAF, USN, USMC, and USCG).
12	Percent	Of personnel treated who are from allied, coalition, or host nation forces.
13	Percent	Of enemy prisoners of war (EPW) and/or detained/retained personnel requiring medical treatment.
14	Percent	Of total casualties treated per day in AO who are noncombatants.
15	Percent	Of casualties treated in AO returned to duty.
16	Percent	Of casualties treated in AO who are evacuated in accordance with the stated theater evacuation policy.

ART 6.5.1.2 PROVIDE HOSPITALIZATION

6-68. Hospitalization resources are MTFs which are capable of providing inpatient care and services. Hospitalization continues the medical care provided at Levels I and II of the HSS system. It also provides a far forward surgical capability which provides essential care in theater, outpatient services, and ancillary support (pharmacy, clinical laboratory, radiology services, and nutrition care).Within theater, the hospitalization capability includes returning those patients to duty within the limits of the theater evacuation policy. This conserves the fighting strength by returning trained manpower to the tactical commander. It also provides stabilizing care to facilitate the evacuation of those patients who will not recover from their injuries or illnesses within the stated theater evacuation policy to facilities capable of providing required care. Theater hospitals may be augmented with

hospital augmentation teams to provide specific specialty care. (FM 4-02.10) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Number of beds and services available within the AO is equal to or greater than the peak demand for these services.
02	Time	To refine hospital operations program for AO after receipt of warning order.
03	Time	To achieve required medical staff manning after activation of AO.
04	Percent	Difference between planned hospitalization requirements and actual requirements in AO.
05	Percent	Of planned hospitalization capacity achieved in AO.
06	Percent	Of casualties per day in AO that require hospitalization.
07	Percent	Of hospital beds in AO utilized per month.
08	Percent	Of hospitalized patients who require further medical care outside the AO or in CONUS.
09	Number	Of casualties per day in AO who require hospitalization.
10	Percent	Of patients returning to duty from the hospital within the theater evacuation policy.
11	Percent	Of patients requiring radiology services.
12	Percent	Of patients requiring routine pharmacy support.
13	Percent	Of patients requiring specialized formulary pharmacy support.
14	Number	Of outpatient visits conducted in a month.
15	Percent	Of patients requiring surgical care.
16	Percent	Of patients requiring inpatient medical care.
17	Percent	Of patients requiring renal hemodialysis (when augmented).
18	Percent	Of patients requiring support from special care team (when augmented to provide humanitarian assistance, disaster relief, or support to other stability/support operations).
19	Percent	Of hospital minimal care patients exceeding organic minimal care capabilities (minimal care capability augmentation required).
20	Percent	Of patients requiring head and neck surgical support (when augmented).
21	Percent	Of patients requiring infectious disease investigative and consultation services (when augmented).
22	Percent	Of patients requiring enhanced anatomic pathology, chemistry, and microbiology support (when augmented).
23	Number	Of patients requiring special diets.
	Percent	Of planned nutrition care support and actual requirements in AO.
24	Number	Of supported units/personnel provided training in the Army Health Promotion Program.
25	Number	Of cases requiring telemedicine support (when augmented).

ART 6.5.1.3 PROVIDE DENTAL SERVICES

6-69. Prevent and treat dental disease and injury. ART 6.5.1.3 includes providing operational dental care, which consists of emergency dental care

and essential dental care, and comprehensive care which is normally only performed in fixed facilities in CONUS or in at least a Level III facility. (FM 4-02.19) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Nonavailability of unit personnel because of dental problems does not degrade, delay, or disrupt unit operations.
02	Time	To refine dental service support program for AO after receipt of warning order.
03	Time	To establish comprehensive dental plan on activation of the AO.
04	Time	In advance required to schedule routine dental appointments in AO.
05	Percent	Difference between planned dental service support requirements and actual requirements in AO.
06	Percent	Of planned dental support achieved in AO.
07	Percent	Of personnel in AO rated as class I or class II dental.
08	Percent	Of personnel in AO rated as class III or class IV dental.
09	Percent	Of personnel in AO with no dental rating.
10	Percent	Of units with effective dental health care programs in AO.
11	Percent	Of dental capacity in use per day in AO.
12	Percent	Of dental patients requiring evacuation to Levels III and IV dental care facilities.
13	Percent	Of dental patients requiring evacuation out of theater.
14	Percent	Of dental patients requiring oral/maxillofacial surgery.
15	Number	Of emergency dental cases per quarter in AO.

ART 6.5.1.4 PROVIDE CLINICAL LABORATORY SERVICES

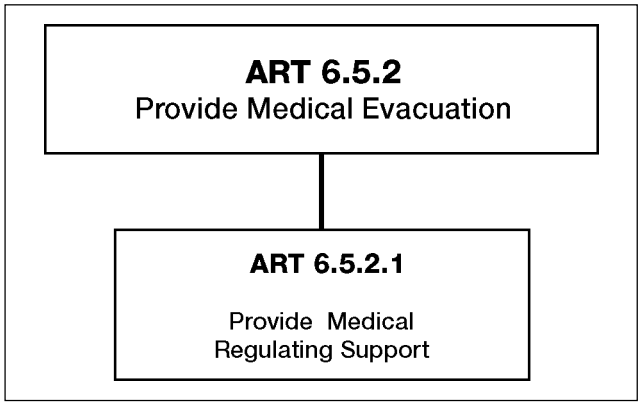
6-70. Perform clinical laboratory diagnostic procedures in support of medical treatment activities. (FM 4-02.10) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Unit operations are not degraded, delayed, or disrupted or the health of unit personnel endangered by the nonavailability of clinical diagnostic laboratory services.
02	Time	To refine clinical diagnostic laboratory service plans for AO after receipt of warning order.
03	Time	To establish required clinical diagnostic laboratory services plan on activation of the AO.
04	Time	Of turnaround for clinical diagnostic laboratory testing results.
05	Percent	Difference between planned clinical diagnostic laboratory requirements and actual requirements of the AO.
06	Percent	Of planned clinical diagnostic laboratory support achieved in the AO.
07	Percent	Of required laboratory personnel in place at activation of the AO.
08	Percent	Of laboratory capacity in use per day in AO.
09	Number	Of clinical laboratory procedures performed in AO per month.

ART 6.5.1.5 PROVIDE MENTAL HEALTH/NEUROPSYCHIATRIC TREATMENT

6-71. Provide medical treatment for mental health and neuropsychiatric medical conditions. (FM 8-51) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Absence of command personnel due to need for MH/NP treatment in an MTF does not degrade, delay or disrupt unit operations.
02	Time	To refine MH/NP treatment program for AO after receipt of warning order.
03	Time	To establish comprehensive MH/NP treatment plan on activation of AO.
04	Percent	Difference between planned MH/NP treatment requirements and actual requirements in the AO.
05	Percent	Of planned psychiatric support achieved in the AO.
06	Percent	Of psychiatrists at activation of AO.
07	Percent	Of other MH/NP treatment personnel at activation of AO.
08	Percent	Of personnel in AO requiring MH/NP treatment per quarter.
09	Percent	Of MH/NP patients returned to duty in the AO.
10	Number	Of MH/NP patients requiring medical evacuation from the AO.



ART 6.5.2 PROVIDE MEDICAL EVACUATION (AIR/GROUND)

6-72. Evacuate sick, injured, or wounded personnel (US, allied, coalition, and host nation forces, enemy prisoners of war, detained/retained personnel, and when authorized, civilian personnel) from the point of injury or wounding to a medical treatment facility in a timely and efficient manner while providing en route medical care. (FM 8-10-6) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Evacuate wounded, sick, and injured personnel to medical treatment facilities without their medical condition declining due to the mode of evacuation or the time it takes to perform the evacuation.
02	Yes/No	Property exchange, such as litters, blankets, and litter straps, degrades, delays, or disrupts medical evacuation operations.
03	Time	To refine medical evacuation operations for AO after receipt of warning order.
04	Percent	Difference between planned medical evacuation requirements and actual requirements in AO.

No.	Scale	Measure
05	Percent	Of planned medical evacuation capacity support achieved in AO.
06	Percent	Of patients requiring patient movement items (PMI).
07	Number	Of casualties per day in AO evacuated from battlefield by precedence (urgent, urgent-surg, priority, routine, or convenience).
08	Number	Of casualties per day evacuated from AO.
09	Number	Of casualties evacuated to medical treatment facility by non-standard medical evacuation platforms.
10	Number	Of casualties who die of wounds due to no or insufficient medical care en route to the medical treatment facility.
11	Number	Of patients hospitalized in the AO that exceeds the theater evacuation policy.

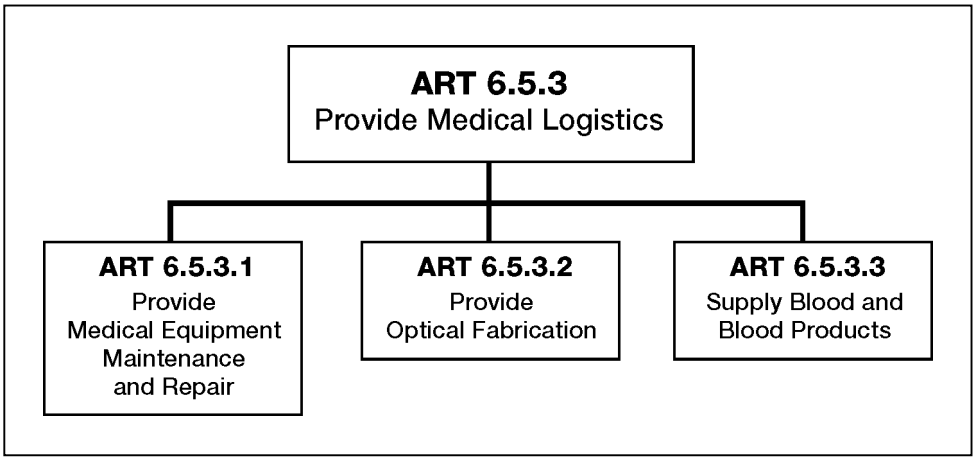
ART 6.5.2.1 PROVIDE MEDICAL REGULATING SUPPORT

6-73. Medical regulating entails identifying the patients awaiting evacuation, locating the available hospital beds, and coordinating the transportation means for movement. The formal medical regulating systems begins at Level III hospitals. (FM 8-10-6) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Regulate the evacuation of wounded, sick, and injured personnel to appropriate MTFs.
02	Yes/No	Required PMI available when and where needed.
03	Yes/No	Lack of PMI degrades, delays, or disrupts medical treatments.
04	Percent	Of patients requiring medical regulating within the AO.
05	Percent	Of patients requiring medical regulating out of the AO.
06	Percent	Of patients requiring PMI.
07	Number	Of medical regulating requests coordinated through the joint patient movement requirements center/theater patient movement requirements center/global patient movement requirements center.
08	Number	Of patients hospitalized in AO that exceeds the theater evacuation policy.

ART 6.5.3 PROVIDE MEDICAL LOGISTICS

6-74. Provide Class VIII medical materiel, medical equipment maintenance (to include medical peculiar repair parts), optical fabrication and repair, and blood management for all US Army forces. When serving as the AO single integrated medical logistics manager, supply of medical materiel will be extended to other services. (FM 4-02.1) (USAMEDDC&S)



Note: This task is related to ART 6.1.8, Provide Medical Materiel and Repair Parts (Class VIII).

No.	*Scale*	*Measure*
01	Yes/No	Medical logistics and blood management within the AO do not degrade, delay or disrupt unit operations and medical treatment of wounded, injured, and sick soldiers.
02	Yes/No	Distribution system gets the right supplies to the right unit at the right time.
03	Yes/No	Able to maintain intransit visibility of distribution systems and assets flowing through the system.
04	Time	To refine medical logistics operations for AO after receipt of warning order.
05	Time	To transship class VIII supplies and medical equipment on activation of AO.
06	Time	To provide emergency shipment of class VIII materiel within AO.
07	Time	To establish system for collection, storage, and distribution of blood products in AO.
08	Time	To initially coordinate blood requirements and distribution of blood and blood products with medical treatment facilities in AO and with the joint force joint blood program office.
09	Time	To transship class VIII supplies and medical equipment on AO activation.
10	Time	To set up medical supply transportation modes within theater.
11	Percent	Of planned combat health logistics capacity achieved in AO.
12	Percent	Difference between planned medical logistics operations requirements and actual requirements in AO.
13	Percent	Of planned class VIII materiel support achieved in AO.
14	Percent	Of class VIII supplies that require replenishment per month.
15	Percent	Of planned blood management capacity achieved in AO.
16	Percent	Of required blood products on hand.
17	Percent	Of blood products in system which must be disposed.

No.	Scale	Measure
18	Percent	Of daily blood reports submitted to joint blood program office (JBPO) within prescribed time limit.
19	Percent	Of personnel in AO who have access to optometry services.
20	Percent	Of required items of supply transiting the distribution system.
21	Percent	Of visibility and control maintained over the distribution system within and external to the AO.
22	Percent	Of unit operations delayed, degraded, or modified due to lack of medical supplies, equipment, repair parts, or blood.
23	Percent	Of Class VIII resources (meeting regulatory requirements) obtained from host nation or other agencies.
24	Number	Of instances that medical capability unavailable due to shortage or lack of class VIII supplies.

ART 6.5.3.1 PROVIDE MEDICAL EQUIPMENT MAINTENANCE AND REPAIR

6-75. Provide medical equipment maintenance and repair of deployed medical equipment. (FM 4-02.1) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Nonavailability of medical equipment does not degrade, delay or disrupt unit operations and medical treatment of wounded, injured, and sick soldiers.
02	Time	To refine medical equipment maintenance and repair operations program for AO after receipt of warning order.
03	Time	To transship medical repair equipment on activation of AO.
04	Time	To provide emergency repair of medical equipment in AO.
05	Percent	Difference between planned medical equipment maintenance and repair operations requirements and actual requirements in AO.
06	Percent	Of planned medical equipment repair support achieved in AO.
07	Percent	Of medical equipment that requires repair per month.
08	Number	Of instances when medical capability was unavailable due to inability to repair medical equipment in AO.

ART 6.5.3.2 PROVIDE OPTICAL FABRICATION

6-76. Provide manufacturing of single and multi-vision lens and eyewear repair. (FM 8-10-9) (USAMEDDC&S)

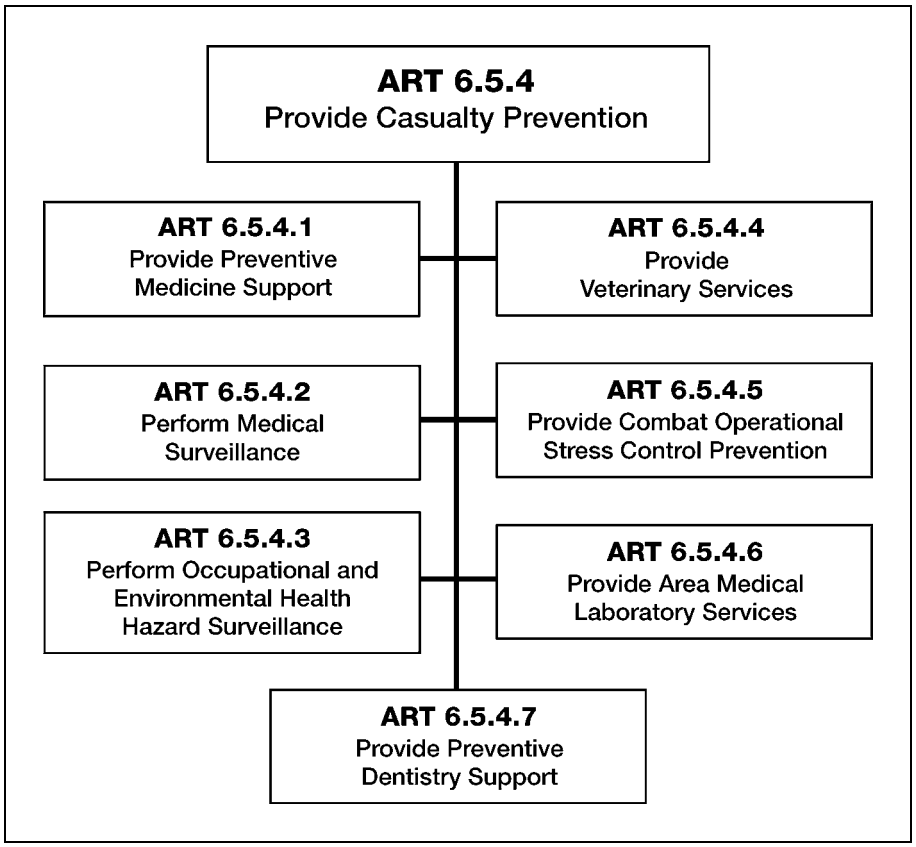
No.	Scale	Measure
01	Yes/No	Nonavailability of single and multi-vision lens and eyewear for unit personnel does not degrade, delay or disrupt unit operations.
02	Time	To refine optical fabrication and repair operations program for AO after receipt of warning order.
03	Time	To transship optometry equipment on activation of AO.
04	Time	Required in advance to schedule optometry appointment in AO.
05	Percent	Difference between planned optical fabrication and repair requirements and actual requirements in AO.
06	Percent	Of planned optometry support achieved in AO.

No.	Scale	Measure
07	Percent	Of personnel in AO requiring optometry facilities.
08	Number	Of optometry appointments in AO per quarter.

ART 6.5.3.3 SUPPLY BLOOD AND BLOOD PRODUCTS

6-77. Supply whole blood and blood products, such as packed red blood cells, with a varying of blood groups and types. (FM 4-02.1) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Nonavailability of blood and blood products does not degrade, delay or disrupt medical treatment of wounded, injured, and sick soldiers.
02	Time	To refine blood management program for AO after receipt of warning order.
03	Time	To establish system for collection, storage, and distribution of blood products in AO.
04	Time	To initially coordinate blood requirements and distribution of blood and blood products to support medical treatment facilities in AO.
05	Percent	Difference between planned blood management requirements and actual requirements in AO.
06	Percent	Of planned blood and blood products support achieved in AO.
07	Percent	Of personnel in AO requiring blood or blood products per quarter.
08	Percent	Of required blood and blood products on hand in AO.
09	Percent	Of daily blood reports submitted on time to joint blood program office.
10	Percent	Of blood products in AO which must be disposed of.
11	Number	Of units of required blood products per initial admission maintained in AO.



ART 6.5.4 PROVIDE CASUALTY PREVENTION

6-78. Casualty prevention is the AMEDD's integrated and focused approach enabling the Army to promote and sustain a healthy and fit force and to prevent casualties from disease, nonbattle injuries, NBC, occupational and environmental health (OEH) hazards, and combat operational stress reactions. It encompasses capabilities from the following AMEDD functional areas (preventive medicine—including medical surveillance and occupational and environmental health surveillance—veterinary services—including the food inspection and animal care missions, and the prevention of zoonotic diseases transmissible to man), COSC prevention, dental services (preventive dentistry), and laboratory services (area medical laboratory support). (FM 4-02) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Casualty prevention programs established within the AO prevent or reduce the number and percent of unit personnel who become casualties as a result of DNBI, NBC, OEH hazards, and combat operational stress.
02	Time	To refine casualty prevention program in the AO after receipt of warning order.
03	Time	To establish casualty prevention plan on activation of the AO.
04	Percent	Difference between planned casualty prevention requirements and actual requirements in the AO.

No.	Scale	Measure
05	Percent	Difference between planned area medical laboratory support requirements and actual requirements in the AO.
06	Percent	Difference between planned preventive medicine services requirements and actual requirements in the AO.
07	Percent	Difference between planned veterinary services requirements and actual requirements in the AO.
08	Percent	Of planned casualty prevention support achieved in the AO.
09	Percent	Difference between planned COSC prevention support requirements and actual requirements in the AO.
10	Percent	Difference between planned preventive dentistry support requirements and actual requirements in the AO.

ART 6.5.4.1 PROVIDE PREVENTIVE MEDICINE SUPPORT

6-79. Prevent disease and nonbattle injuries through the establishment of preventive medicine programs: such as, field hygiene and sanitation, disease surveillance, immunizations, chemoprophylaxis, and education in personal protective measures. (FM 4-02.17) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Preventive medicine programs established within the AO prevent or reduce the number and percent of unit personnel who become casualties as a result of disease or nonbattle injuries.
02	Time	To refine preventive medicine program for AO after receipt of warning order.
03	Time	To establish preventive medicine plan (to include immunizations, pretreatment, prophylaxis, and barrier creams) on activation of the AO.
04	Percent	Difference between planned preventive medicine requirements and actual requirements in AO.
05	Percent	Of planned preventive medicine support achieved in AO.
06	Percent	Of personnel provided disease prevention measures in the AO.
07	Percent	Of personnel in AO without health education and training provided.
08	Number	Of food service facilities requiring immediate corrective actions.
09	Number	Of required aerial spray missions conducted.
10	Percent	Of water points inspected for potability.
11	Number	Of bivouac sites inspected for disease and OEH hazards.
12	Percent	Of unit field sanitation teams trained.
13	Number	Of consultations provided on preventive medicine measures.

ART 6.5.4.2 PERFORM MEDICAL SURVEILLANCE

6-80. Perform medical surveillance, to include the collection and analysis of health status and medical threat information before, during, and following deployment. Ensure common awareness of potential medical threats and monitor implementation of preventive medicine measures (FM 4-02.17) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Medical surveillance programs established within the AO to prevent or reduce the number and percent of unit personnel who become casualties as a result of DNBI.
02	Time	To refine medical surveillance programs for AO after receipt of warning order.
03	Time	To survey operational environment to detect and identify DNBI hazards and formulate means for minimizing the effects.
04	Percent	Difference between planned medical surveillance requirements and actual requirements in AO.
05	Percent	Of planned medical surveillance support achieved in AO.
06	Percent	Of risk to the force associated with identified elements of the medical threat.
07	Percent	Of identified DNBI exposures recorded in individual health records.
08	Number	Of epidemiological investigations conducted in AO.
09	Number	Of identified disease sources and/or other hazards.

ART 6.5.4.3 PERFORM OCCUPATIONAL AND ENVIRONMENTAL HEALTH HAZARD SURVEILLANCE

6-81. Perform occupational and environmental health (OEH) hazard surveillance. (FM 4-02.17) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Occupational and environmental hazard surveillance established within the AO to prevent or reduce the number and percent of unit personnel who become exposed to OEH hazards.
02	Time	To refine OEH hazard surveillance program for AO after receipt of warning order.
03	Time	To survey operational environment to detect and identify OEH hazards and to formulate means for minimizing effects.
04	Percent	Difference between planned OEH health surveillance requirements and actual requirements within the AO.
05	Percent	Of personnel in AO without medical threat education and training provided.
06	Percent	Of risk to the force associated with identified OEH hazards.
07	Percent	Of identified OEH hazards within the AO.

ART 6.5.4.4 PROVIDE VETERINARY SERVICES

6-82. Serve as the DOD executive agent for veterinary services for all services. Perform food safety surveillance, which includes food hygiene and quality assurance, inspection of Class I sources, microbial analysis of food, and temperature monitoring of transported and stored food supplies, and to assess potential health hazards in the AO; identify, evaluate, and assess animal diseases of military significance; and provide complete veterinary health care to DOD military working dogs (MWDs) and any other government owned animals in the AO. (FM 8-10-18) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Nonavailability of veterinary services does not degrade, delay or disrupt unit operations.
02	Time	To refine veterinary services program for AO after receipt of warning order.
03	Time	To establish comprehensive veterinary plan on activation of the AO.
04	Percent	Difference between planned veterinary service requirements and actual requirements in AO.
05	Percent	Of planned veterinary support achieved in AO.
06	Percent	Of required food inspections meeting food safety standards in the AO.
07	Percent	Of government-owned animals treated and returned to duty in the AO.
08	Percent	Of veterinary capacity in use per day in AO.
09	Number	Of local procurement establishment inspections performed in AO per month.
10	Number	Of animal diseases of military significance in the AO.
11	Number	Of military working dogs and other government owned animals in AO requiring periodic veterinary support.

ART 6.5.4.5 PROVIDE COMBAT OPERATIONAL STRESS CONTROL PREVENTION

6-83. Provide combat operational stress control (COSC) prevention by establishing prevention programs, conducting critical event debriefings, and providing consultation and educational services. (FM 8-51) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Absence of command personnel from stress-related causes does not degrade, delay, or disrupt unit operations.
02	Time	To refine COSC prevention program for AO after receipt of warning order.
03	Percent	Of critical incident debriefings planned and actual requirements.
04	Percent	Of required COSC personnel at activation in AO.
05	Percent	Decrease in number of stress-related casualties after establishment and implementation of COSC prevention plan/program in AO.
06	Number	Of consultations on COSC prevention techniques with individual soldiers and/or groups.
07	Number	Of consultations on COSC prevention techniques with unit leaders.
08	Number	Of education/training events on COSC prevention techniques.
09	Number	Of combat stress control cases requiring evacuation from AO.

ART 6.5.4.6 PROVIDE AREA MEDICAL LABORATORY SERVICES

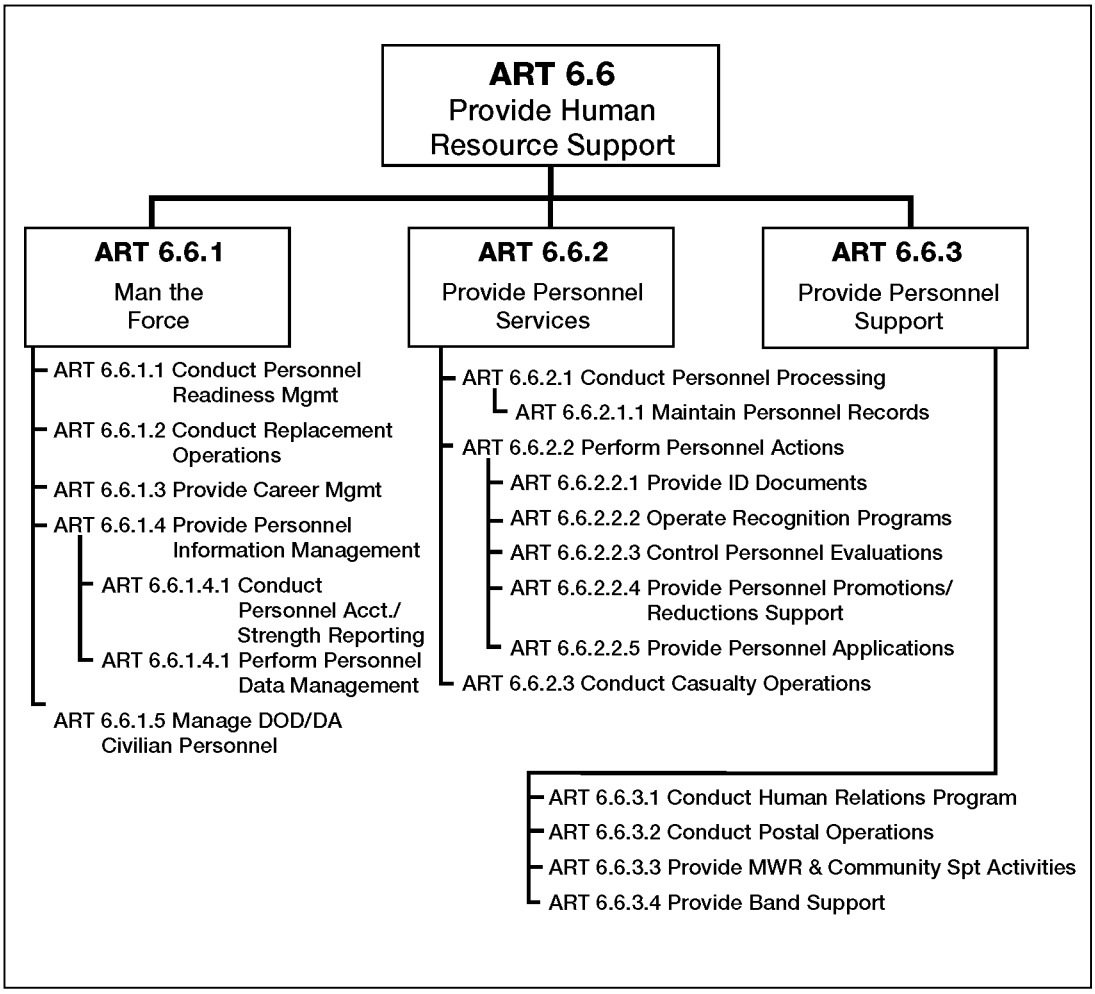
6-84. Identify, evaluate, and assess health hazards in the AO. This task includes providing endemic disease laboratory services, occupational and environmental laboratory services, and NBC laboratory services. (FM 4-02) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Nonavailability of laboratory services does not degrade, delay or disrupt unit operations or endanger the health of unit personnel.
02	Time	To refine area medical laboratory services program for AO after receipt of warning order.
03	Time	To establish comprehensive area medical laboratory service plan on activation of the AO.
04	Time	Of turnaround for technical lab testing results.
05	Percent	Difference between planned area medical laboratory requirements and actual requirements in AO.
06	Percent	Of planned laboratory support achieved in AO.
07	Percent	Of required laboratories at activation of AO.
08	Percent	Of required laboratory personnel available at activation of AO.
09	Percent	Of laboratory capacity in use per day in AO.
10	Number	Of endemic diseases identified through lab testing in AO.
11	Number	Of nuclear, biological, and chemical warfare agents identified and/or confirmed through laboratory testing in the AO.
12	Number	Of toxic industrial materials identified and/or confirmed through laboratory testing in the AO.

ART 6.5.4.7 PROVIDE PREVENTIVE DENTISTRY SUPPORT

6-85. Military preventive dentistry incorporates primary, secondary, and tertiary preventive measures taken to reduce or eliminate oral conditions that decrease a soldier's fitness to perform his mission and cause absence from duty. (FM 4-02.19) (USAMEDDC&S)

No.	Scale	Measure
01	Yes/No	Preventive dentistry programs established within the AO prevent or reduce the number and percent of command personnel who become casualties as a result of dental disease and injury.
02	Time	To establish Dental Combat Effectiveness Program upon activation of the AO.
03	Time	To refine preventive dentistry plan after receipt of warning order.
04	Percent	Difference between planned preventive dentistry requirements and actual requirements within the AO.
05	Percent	Of soldiers receiving prophylaxis treatment.
06	Percent	Of soldiers receiving training/education in Field Oral Hygiene Information Program.
07	Percent	Of units achieving optimal oral health (emergency dental rate: *dental emergencies/1000 troops/year*) of 75/1000/year.
08	Percent	Of units achieving adequate oral health of 150/1000/year.
09	Percent	Of units where oral health may degrade operational effectiveness: 300/1000/year.



SECTION VI – ART 6.6: PROVIDE HUMAN RESOURCE SUPPORT

6-86. Provide activities and functions to sustain human resource functions of manning the force and providing personnel service support to service members, their families, DA civilians, contractors, and organizations. Manage functions that range from personnel procurement through training, professional development, distribution, and sustainment to retirement or separation, and help ensure a quality force. (FM 12-6) (USAAGS)

No.	*Scale*	*Measure*
01	Yes/No	Human Resource support services and procedures help the supported unit accomplish its mission.
02	Yes/No	Adequate rest and recuperation facilities are available for the number of Army personnel supported within the AO.
03	Time	To establish procedures with International Committee of the Red Cross for handling, treatment, and transfer of prisoners of war, after receipt of warning order.
04	Time	To obtain replacement personnel and assign them to units.

No.	Scale	Measure
05	Time	For force chaplain to research and interpret cultural and religious factors pertinent to the AO.
06	Time	To obtain legal services on request.
07	Time	To review civil affairs plan by legal authority.
08	Percent	Of unit and non-unit personnel scheduled to move to mobilization station or POEs arrived IAW scheduled arrival dates/times.
09	Percent	Of units' actual manning meets or exceeds authorized manning levels.
10	Percent	Of unit personnel requirements are met by deployment day (D-Day).
11	Percent	Of TPFDD personnel requirements resourced prior to C-Day .
12	Percent	Of personnel services capabilities in place and operational on activation of the AO.

ART 6.6.1 MAN THE FORCE

6-87. Ensure the uninterrupted flow of soldiers to the battlefield so that the commander has the personnel required to accomplish his mission. ART 6.6.1 involves management of strength accounting data and readiness assessments, and providing replacements. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	The supported unit has sufficient number of soldiers in the right military specialties and grades to accomplish its mission.
02	Days	To obtain replacement personnel and assign them to units.
03	Percent	Of unit and non-unit personnel scheduled to move to mobilization station or POEs arrived IAW scheduled arrival dates/times.
04	Percent	Of units' actual manning meets or exceeds authorized manning levels.
05	Percent	Of unit personnel requirements are met by D-Day.
06	Percent	Of TPFDD personnel requirements resourced prior to C-Day.
07	Number	Of operations degraded, delayed, or modified due to personnel shortages.
08	Number	Of replacements transported daily to their new units.

ART 6.6.1.1 CONDUCT PERSONNEL READINESS MANAGEMENT

6-88. Distribute soldiers to subordinate commands based on documented manpower authorizations and the commander's priorities. ART 6.6.1.1 involves the critical manning tasks of predict, resource, monitor, assess, and adjust. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Unit soldiers distributed IAW commander's priorities and documented manpower authorizations.
02	Time	On average for reception and check-in at new unit.
03	Time	Delay in providing replacements due to faulty record keeping.
04	Time	Delay in providing replacements due to transportation shortfalls.
05	Percent	Of record transactions accomplished correctly.

No.	Scale	Measure
06	Percent	Of replacement personnel provided to units using Army assets within the AO such as return-to-duty personnel from hospitals, personnel from unit deactivations, and personnel made excess by revised modified tables of organization and equipment.
07	Number	Of operations degraded, delayed, or modified due to personnel shortages.
08	Number	Of record transactions accomplished correctly.
09	Number	Of replacement personnel provided by command.

ART 6.6.1.2 CONDUCT REPLACEMENT OPERATIONS

6-89. The physical reception, accounting, processing, support, and delivery of military and civilian personnel. ART 6.6.1.2 includes replacements and return-to-duty soldiers. The system provides primarily for individual replacements and groupings of individuals up through squad, crew, or team level as required by operations. It does not involve unit replacement operations. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	The conduct of replacement operations supports supported unit mission accomplishment.
02	Time	On average to process one soldier.
03	Times	Of delay for transporting soldier to his unit on completion of processing.
04	Percent	Of replacement processing delayed due to faulty personnel records.
05	Percent	Of personnel assigned incorrectly.
06	Number	Of personnel processed daily.
07	Number	Of personnel assigned incorrectly.

ART 6.6.1.3 PROVIDE CAREER MANAGEMENT

6-90. Provide the military personnel management processes of meeting unit readiness objectives. This includes assisting soldiers plan careers through a sequence of events that range from accession, training, classification, assignment, utilization, retention, and separation from military service. ART 6.6.1.3 includes officer procurement, formal and specialized training applications, classification management, manpower utilization, assignment management, retention management, and service termination. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Career management procedures support mission accomplishment.
02	Time	To process awards on average.
03	Time	To process promotions on average.
04	Percent	Of performance evaluations completed within established time parameters.
05	Percent	Of personnel who receive awards within established time lines.
06	Percent	Of eligible personnel retained.

No.	Scale	Measure
07	Percent	Of eligible personnel separated from service with set time parameters.
08	Number	Of eligible personnel separated from service within established time parameters.
09	Number	Of awards presented in AO within established time lines.

ART 6.6.1.4 PROVIDE PERSONNEL INFORMATION MANAGEMENT

6-91. Collect, verify, maintain, report, and distribute military personnel management information about soldiers, DA civilians, contractors, and units. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	The personnel information available to a unit enhances that unit's ability to accomplish its mission.
02	Time	On average for providing information.
03	Time	Of delay in providing information due to data transmission.
04	Percent	Of record transactions accomplished correctly.
05	Percent	Of average time for providing information.
06	Number	Of record transactions accomplished correctly.

ART 6.6.1.4.1 Conduct Personnel Accounting and Strength Reporting

6-92. Record by-name data on soldiers, DA civilians, and contractors when they arrive and depart units, when their duty status changes, and when their grade changes. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	The personnel accounting and strength reporting enhances the unit's ability to accomplish its mission.
02	Time	To audit personnel record transactions by unit.
03	Percent	Of record transactions accomplished correctly.
04	Percent	Of personnel assigned incorrectly.
05	Number	Of record errors in personnel files by unit.
06	Number	Of record transactions accomplished correctly.
07	Number	Of personnel assigned incorrectly.

ART 6.6.1.4.2 Perform Personnel Data Management

6-93. Synchronize the operation of personnel data systems to ensure both vertical and horizontal integration of information is maintained in a timely and accurate manner. ART 6.6.1.4.2 provides information products to commanders and personnel managers so personnel readiness decisions can be made. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Personnel data is available in a timely and accurate manner to make personnel readiness decisions.
02	Time	On average for collecting information.
03	Time	On average for providing information.
04	Number	Of operations degraded, delayed, or modified due to personnel changes.

ART 6.6.1.5 MANAGE DEPARTMENT OF DEFENSE/ARMY CIVILIAN PERSONNEL

6-94. Recruit, train, assign, promote, and reduce DOD/DA civilian personnel through civilian personnel management services. ART 6.6.1.5 includes civilian personnel evaluations, the provision of awards, and the management of civilian records. During deployments, ensure that deployed civilians (DOD/DA/contractors) are accounted for and receive personnel services and support to which they are entitled. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Management of DOD/DA civilian personnel supports unit mission accomplishment.
02	Time	To provide information (on average).
03	Time	To provide services (on average).
04	Time	To recruit and fill civilian positions (on average).
05	Percent	Of civilian personnel actions processed correctly.
06	Percent	Of civilian personnel qualified for their positions.
07	Percent	Of civilian workforce receiving training during a designated time.
08	Percent	Of civilian position vacancies occurring during a designated time.
09	Number	Of civilian performance awards issued during a designated time.
10	Number	Of civilian personnel actions processed correctly.
11	Number	Of civilian complaints and grievances reported and resolved during a time period.
12	Number	Of civilian personnel supported (given in an average).
13	Cost	Of DOD/DA civilian personnel (salaries and benefit packages) supporting unit mission accomplishment.

ART 6.6.2 PROVIDE PERSONNEL SERVICES

6-95. Administer the essential personnel services to maintain soldier readiness, and sustain the human dimension of the force. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	The unit's ability to accomplish its mission is enhanced as a result of the quality or quantity of personnel service support provided to it.
02	Yes/No	Adequate rest and recuperation facilities are available for the number of Army personnel supported within the AO.
03	Time	To establish procedures with International Committee of the Red Cross for handling, treatment, and transfer of prisoners of war, after receipt of warning order.
04	Time	For force chaplain to research and interpret cultural and religious factors pertinent to the AO.
05	Time	To obtain legal services on request.
06	Time	To review civil affairs plan by legal authority.
07	Percent	Of personnel services capabilities in place and operational on activation of the AO.

ART 6.6.2.1 CONDUCT PERSONNEL PROCESSING

6-96. Execute the personnel functions associated with the in/out processing of soldiers, DA civilians, and contractors. Maintain deployability of soldiers through soldier readiness processing and the accomplishment of reassignment and separation processing requirements. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Personnel processing procedures make those individuals being processed feel like valued members of the organization.
02	Time	To provide customers necessary information related to in or out processing (given on average).
03	Time	On average for processing.
04	Percent	Of record transactions accomplished correctly.
05	Percent	Of unit processing requirements met by D-Day.
06	Number	Of record transactions accomplished correctly.

ART 6.6.2.1.1 Maintain Personnel Records

6-97. Execute the records-keeping aspect of all critical individual personnel information (manual or automated) and the management controls that ensure personnel data is updated as soon as the information is available. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Accurate personnel data is available in a timely manner to make personnel readiness decisions.
02	Time	To enter information in official military personnel file (on average).
03	Time	To transfer unit data electronically into Total Army Personnel Data Base.
04	Percent	Of official military personnel files that have incorrect data entered (based on sample surveys).

ART 6.6.2.2 PERFORM PERSONNEL ACTIONS

6-98. Conduct personnel actions and services that are critical in supporting individual career advancement and development, proper identification documents for security and benefits entitlements, and recognition of achievements and service performance. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Personnel actions let soldiers know their contributions are valued by that organization.
02	Time	To process action (on average).
03	Percent	Of number of actions returned for incompleteness.
04	Percent	Of personnel actions processed correctly.

ART 6.6.2.2.1 Provide Identification Documents

6-99. Provide DOD identification documents that comply with the articles of the Geneva Convention of 1949, identification tags and badges, and other identification documents as required. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Every soldier, DOD/DA civilian, or civilian contractor within the AO has his required identification documents.
02	Time	To process identification actions (on average).
03	Percent	Accuracy in the preparation of identification documents.
04	Number	Of official documents processed.

ART 6.6.2.2.2 Operate Recognition Programs

6-100. Provide awards and decorations support, and other recognition programs to assist commanders in recognizing the valor, achievements, and service of individuals. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Unit recognition program fairly, equitably, and accurately recognizes the contributions made by unit and supporting individuals toward mission accomplishment.
02	Time	To process award, (on average).
03	Percent	Of award nominations returned to commands for administrative corrections.
04	Percent	Of force receiving awards per year in AO.
05	Percent	Of award nominations denied/downgraded.

ART 6.6.2.2.3 Control Personnel Evaluations

6-101. Document the performance of soldiers in the execution of duties. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Complete unit personnel evaluations fairly, equitably and accurately and within established time lines.
02	Time	To process officer/noncommissioned officer evaluation reports (on average).
03	Percent	Of officer/noncommissioned officer evaluation reports returned to commands for administrative corrections.
04	Percent	Of evaluation reports submitted after deadlines prescribed by Army regulation.

ART 6.6.2.2.4 Provide Personnel Promotions and Reductions Support

6-102. Execute promotion policies and processes to fill authorized personnel spaces with qualified personnel. ART 6.6.2.2.4 also maintains the discipline and quality of the force through reductions resulting from disciplinary and or administrative actions. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Unit personnel promotions and reductions occur on a fair and equitable basis.
02	Time	To process promotions (on average).
03	Time	To administer and effect reductions (on average).
04	Time	To await non-judicial punishment or courts-martial (on average).

No.	Scale	Measure
05	Percent	Of eligible personnel promoted by grade in a given period.
06	Percent	Of promotions delayed due to administrative errors in a given period.
07	Percent	Of force receiving disciplinary action in a given period.
08	Percent	Of promotions processed correctly in a timely manner.
09	Number	Of promotions per grade in a given period.

ART 6.6.2.2.5 Provide Personnel Applications

6-103. Support individuals in processing applications and requests for programs, training, and other individual personnel actions to further individual readiness and career advancement and enhance the capabilities of the total force. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Unit personnel provide support, such as forms and application information, so individuals can request training and other individual personnel development actions to increase individual readiness and career advancement on a fair and equitable basis.
02	Time	To process action (on average).
03	Percent	Of actions processed correctly.
04	Number	Of actions processed correctly.

ART 6.6.2.3 CONDUCT CASUALTY OPERATIONS

6-104. Record, report, verify, and process casualty information; conduct casualty notification; and provide casualty assistance to surviving family members. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Families, of soldiers and other personnel with official standing within the AO who become casualties, are accurately notified in a timely and compassionate manner.
02	Time	To establish casualty liaison team at medical facilities.
03	Time	To record and report casualty information.
04	Time	To obtain evacuation reports from medical facilities.
05	Time	Of average delay in reporting and processing casualties reports.
06	Time	To provide casualty information to commanders.
07	Percent	Of casualties not reported to DA within 24 hours of incident.

ART 6.6.3 PROVIDE PERSONNEL SUPPORT

6-105. Administer the personnel support required to execute human relations (HR) programs, substance abuse prevention programs, enhance unit cohesion, and sustain the morale of the force. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	HR programs support unit readiness and morale activities.
02	Yes/No	All deployed unit members have access to HR programs.
03	Time	To routinely establish HR programs.
04	Percent	Of planned HR programs in place and operational.
05	Number	Of personnel who have access to HR programs.

ART 6.6.3.1 CONDUCT HUMAN RELATIONS PROGRAMS

6-106. Execute Army HR programs critical to sustaining individual and unit readiness. This includes the equal opportunity program, sexual harassment program, substance abuse prevention program, and weight control program. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	All unit members feel they are valued members of the unit.
02	Yes/No	Human relations programs are fully established and enhance individual and unit readiness.
03	Time	Necessary to implement a HR program or resolve an individual case.
04	Percent	Of planned HR programs in place and operational.
05	Percent	Of HR cases successfully closed/completed.
06	Number	And types of HR programs required.
07	Number	Of personnel in HR programs.
08	Number	Of cases successfully closed/completed.

ART 6.6.3.2 CONDUCT POSTAL OPERATIONS

6-107. Operate a network to process mail and provide postal services. Processing mail involves receiving, separating, sorting, dispatching, and redirecting ordinary and accountable mail; conducting international mail exchange; handling casualty and enemy prisoner of war mail; and screening for contaminated/suspicious mail. Postal services involve selling stamps; cashing and selling money orders; providing registered (including classified up to secret); insured, and certified mail services; and processing postal claims/inquiries. (FM 12-6) (USAAGS)

No.	Scale	Measure
01	Yes/No	Unit members can send and receive mail.
02	Yes/No	Postal operations established in a timely manner that enhances force morale.
03	Time	To process and distribute mail, after receipt.
04	Time	For mail to transit from CONUS to overseas addressee (on average).
05	Percent	Of required airmail terminals and post offices established within planned timelines.
06	Percent	Of routes that have alternative routing sites.
07	Percent	Of routes that have daily delivery.
08	Percent	Of processed mail undeliverable.
09	Number	Of tons of backlogged mail, by class per day.

ART 6.6.3.3 PROVIDE MORALE, WELFARE, AND RECREATION AND COMMUNITY SUPPORT ACTIVITIES

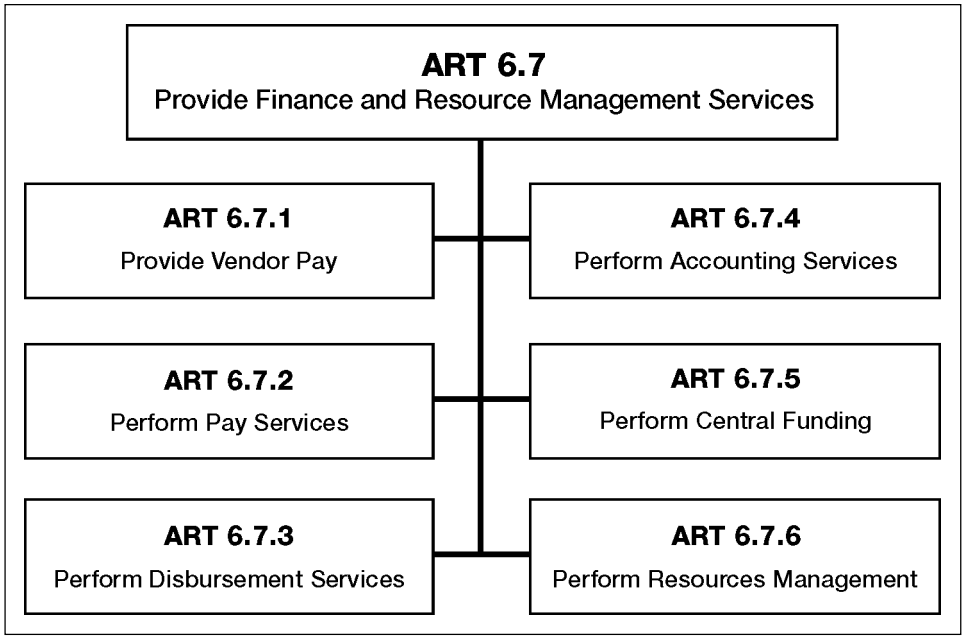
6-108. Provide soldiers and civilians with recreational and fitness activities, and goods and services. For contingency operations, the morale, welfare, and recreation network provides unit recreation and sports programs, and rest areas for brigade-sized and larger units. Community support programs include the American Red Cross, family support, and the exchange system. The American Red Cross provides forward-deployed units with a direct link to their families during emergencies, and thus gives soldiers confidence that their families are safe and capable of carrying on during their absences. (FM 12-6) (USAAGS)

No.	*Scale*	*Measure*
01	Yes/No	Unit personnel and other authorized individuals have safe means to release some of the stress imposed on them as a result of their participation in full spectrum operations.
02	Yes/No	Quality of MWR program meets unit and individual needs.
03	Time	To establish adequate recreation/fitness facilities in AO after forces close in theater.
04	Percent	Of deployed units that have access to American Red Cross programs.
05	Percent	Of personnel with access to adequate recreational/fitness facilities.
06	Percent	Of deployed personnel who have access to rest and recuperation facilities.
07	Percent	Of units that have active community support programs.
08	Number	Of hours per day allotted to personnel leisure/recreational/fitness activities.

ART 6.6.3.4 PROVIDE BAND SUPPORT

6-109. Provide music to enhance unit cohesion and morale, and to musically support military operations. Bands provide support for ceremonies, troop support functions, concerts, protocol functions, and religious ceremonies, both for US troops and host-nation populations. (FM 12-6) (USAAGS)

No.	*Scale*	*Measure*
01	Yes/No	Band support contributes to mission accomplishment either by enhancing unit cohesion and morale or by entertaining civilian population.
02	Time	To rehearse the music required for the mission.
03	Time	To rehearse drill and ceremony required for the mission.
04	Time	To coordinate the performance of an assigned mission.
05	Time	To arrange logistical and administrative support for the band.
06	Time	To obtain recommendations and legal advice from the staff judge advocate.
07	Percent	Of authorized personnel required to perform the specific mission.
08	Percent	Of authorized musical equipment on hand and serviceable.



SECTION VII – ART 6.7: PROVIDE FINANCE AND RESOURCE MANAGEMENT SERVICES

6-110. Provide finance and resource management services to commanders. Finance services include pay for vendors, services, accounting, central funding, technical advice and policy guidance. Resource management services include technical advice to commanders on resource management implications and on costs of preparing and conducting operations. (FM 14-100) (USAFIS)

No.	*Scale*	*Measure*
01	Yes/No	Finance and resource management services enhance the unit's ability to accomplish its mission.
02	Yes/No	Operations are funded and reimbursed properly according to policy guidance.
03	Time	To refine finance service support plan after receipt of warning order.
04	Time	To process travel pay vouchers (on average).
05	Time	To establish and maintain nonappropriated fund accounting after establishment of AO.
06	Time	To establish and maintain central currency fund support after establishment of AO.
07	Time	To establish required electronic transfer accounts.
08	Time	To refine resource management plan after receipt of warning order.
09	Time	To provide guidance on currency and or appropriations funding procedures for operations, after AO establishment.
10	Percent	Of finance services provided by host-nation elements.
11	Percent	Of personnel in AO experiencing pay problems per month.
12	Percent	Of audit samples with accounting errors.

No.	Scale	Measure
13	Percent	Of disbursing corrective actions required per 1,000 customers.
14	Percent	Of status of funds reports delayed due to administrative errors/delays.
15	Percent	Of reimbursement requests returned to units and individuals for administrative errors.
16	Percent	Of disbursing transactions, accounting actions, and/or pay actions processed in an accurate and timely fashion.
17	Number	Of vendor contracts let per month.
18	Number	Of disbursing transactions, accounting actions, and/or pay actions performed per month.
19	Number	Of accounts maintained per month.
20	Number	Of accounts audited per month.
21	Number	Of local depository accounts established per month.
22	Number	Of commands soliciting advice on reimbursement of training funds, per month.
23	Number	Of instances of commands improperly funding operations on host-nation territory.
24	Cost	Per month for contracted services in AO.
25	Cost	Per month for foreign national labor in AO.
26	Cost	In dollars per month transacted in foreign currency exchange.
27	Cost	In dollars per month disbursed in US Treasury checks.

ART 6.7.1 PROVIDE VENDOR PAY

6-111. Provide finance support to local procurement efforts—contracting and local purchases of supplies, equipment, and services. (FM 14-100) (USAFIS)

No.	Scale	Measure
01	Yes/No	Local procurement efforts necessary for mission accomplishment are supported in a timely manner.
02	Yes/No	Accuracy of vendor pay support is within acceptable limits.
03	Yes/No	Vendor pay is timely in that it occurs within established time lines.
04	Time	To refine finance service support plan after receipt of warning order.
05	Time	To procure local contractors/vendors services after establishment of AO.
06	Percent	Of personnel services contracted with host-nation elements.
07	Number	Of vendor contracts let per month.
08	Cost	Per month for contracted services in AO.

ART 6.7.2 PERFORM PAY SERVICES

6-112. Provide pay for military, civilians, and foreign nationals. Provide travel pay. (FM 14-100) (USAFIS)

No.	Scale	Measure
01	Yes/No	Military service members, DA civilians, and foreign nationals employed directly by the Army are paid on time IAW established pay schedules for their services.

No.	Scale	Measure
02	Time	To refine finance service support plan after receipt of warning order.
03	Time	To process travel pay vouchers on average.
04	Percent	Of personnel in AO experiencing pay problems per month.
05	Percent	Of errors in inputed data reflecting changes in pay status of supported individuals in a given time.
06	Number	Of times when supported individuals are not accurately paid in a given time.
07	Number	Of transactions performed per month.
08	Cost	Per month for foreign national labor in AO.

ART 6.7.3 PERFORM DISBURSEMENT SERVICES

6-113. Make disbursements by check, cash, and electronic fund transfer on certified vouchers; receive, collect, and control currencies; maintain accountable records; provide fund paying agents. (FM 14-100) (USAFIS)

No.	Scale	Measure
01	Yes/No	The disbursement services enhance the supported unit's ability to accomplish its mission.
02	Time	To refine finance service support plan after receipt of warning order.
03	Time	To process travel pay vouchers on average.
04	Percent	Of personnel in AO experiencing pay problems per month.
05	Percent	Of audit samples with accounting errors.
06	Percent	Of disbursing corrective actions required per 1,000 customers.
07	Number	Of transactions performed per month.
08	Cost	In dollars per month tied up in currency exchange functions in AO.

ART 6.7.4 PERFORM ACCOUNTING SERVICES

6-114. Maintain appropriated and nonappropriated fund accounting records and report the status of funds distributed or collected. (FM 14-100) (USAFIS)

No.	Scale	Measure
01	Yes/No	The accounting services enhance the supported unit's ability to accomplish its mission.
02	Time	To refine finance service support plan after receipt of warning order.
03	Time	To establish and maintain nonappropriated fund accounting after establishment of AO.
04	Percent	Of audit samples with accounting errors.
05	Percent	Of status of funds reports delayed due to administrative errors/delays.
06	Number	Of accounts maintained per month.
07	Number	Of accounts audited per month.

ART 6.7.5 PERFORM CENTRAL FUNDING

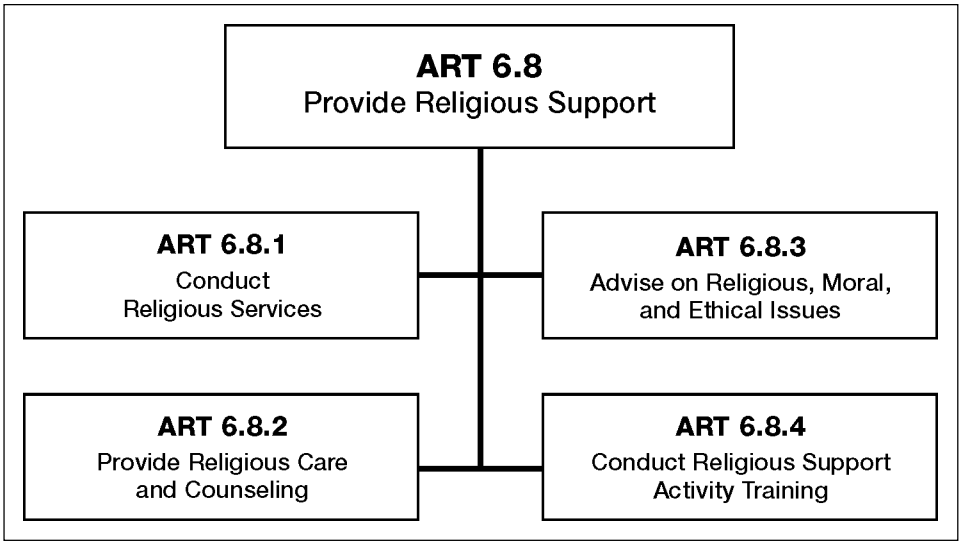
6-115. Provide central currency support: including, providing US currency, foreign currencies, and US Treasury checks; establishing local depository accounts; and arranging for electronic fund transfers. (FM 14-100) (USAFIS)

No.	Scale	Measure
01	Yes/No	The central funding services enhance the supported unit's ability to accomplish its mission.
02	Time	To refine finance service support plan after receipt of warning order.
03	Time	To establish and maintain central currency fund support after establishment of AO.
04	Time	To establish required electronic transfer accounts.
05	Number	Of local depository accounts established per month.
06	Cost	In dollars per month transacted in foreign currency exchange.
07	Cost	In dollars per month disbursed in US Treasury checks.

ART 6.7.6 PERFORM RESOURCES MANAGEMENT

6-116. Provide advice to commanders on resource management implications and on costs of preparing for and executing operations. Obtain guidance on fund citations and funding levels and provide them to forces and supporting finance elements. Track and report costs of battlefield operations to support efforts for reimbursements of costs initially paid from available training and readiness funds. (FM 14-100) (USAFIS)

No.	Scale	Measure
01	Yes/No	The resource management services enhance the supported unit's ability to accomplish its mission.
02	Yes/No	Operations are funded and reimbursed properly according to policy guidance.
03	Time	To refine resource management plan after receipt of warning order.
04	Time	To provide guidance to commands on funding procedures for operations, after establishment of AO.
05	Percent	Of reimbursement requests returned to units and individuals for administrative errors.
06	Percent	Of operations funded and reimbursed properly according to policy guidance.
07	Number	Of instances of commands improperly funding operations on host-nation territory.



SECTION VIII – ART 6.8: PROVIDE RELIGIOUS SUPPORT

6-117. Provide for the spiritual, ethical, and moral needs of soldiers, family members, and authorized civilians (to include contractors) at all levels. (FM 1-05) (USACHCS)

No.	*Scale*	*Measure*
01	Yes/No	The religious support services enhance the supported unit's ability to accomplish its mission.
02	Time	To develop a religious support plan.
03	Time	To coordinate faith group coverage to include: General Protestant, Roman Catholic, Orthodox, Jewish, Buddhist, and Islamic.
04	Time	To coordinate with lay leaders to perform worship services.
05	Time	To secure the use of a chapel for performing worship services.
06	Time	To coordinate transportation to enable unit ministry teams (UMTs) to get to required locations to provide religious support.
07	Time	To procure sufficient ecclesiastical supplies to conduct services.
08	Time	To plan and prepare for religious services.
09	Time	For the UMT to receive a request for counseling.
10	Time	For individual to be seen by a chaplain.
11	Time	To request chaplain detachments A/B to perform counseling.
12	Time	To coordinate for a chapel, office, or classroom for religious support.
13	Time	To coordinate transportation to enable UMTs to get to locations to provide religious support.
14	Time	To plan and prepare for religious support.
15	Time	Spent advising on religious, moral, and ethical issues.
16	Time	To assess moral and ethical climate of a unit.
17	Time	To provide religious support.
18	Percent	To use chaplain detachments A/B to perform religious support.

No.	Scale	Measure
19	Percent	Of friendly force provided the opportunity to attend religious services on a regular basis.
20	Percent	Of soldiers who require follow-up counseling.
21	Number	Of hours per week spent providing religious support.
22	Number	Of UMTs available within the AO.
23	Number	Of soldiers who require follow-up counseling.
24	Cost	Of religious services and support provided by contractors.

ART 6.8.1 CONDUCT RELIGIOUS SERVICES

6-118. Provide or perform collective and/or denominational religious worship services and religious coverage in an AO. Conduct or provide for memorial ceremonies; memorial services and funerals; and other sacraments, rites, and ordinances. (FM 1-05) (USACHCS)

No.	Scale	Measure
01	Yes/No	Religious services meet the needs of the supported unit's personnel.
02	Time	To develop a religious support plan.
03	Time	To coordinate faith group coverage to include: General Protestant, Roman Catholic, Orthodox, Jewish, Buddhist, and Islamic.
04	Time	To coordinate with lay leaders to perform worship services.
05	Time	To secure the use of a chapel for performing worship services.
06	Time	To coordinate transportation to enable UMTs to get to required locations to provide religious support.
07	Time	To procure sufficient ecclesiastical supplies to conduct services.
08	Time	To plan and prepare for religious services.
09	Percent	To use chaplain detachments A/B to perform worship.
10	Percent	Of friendly force provided the opportunity to attend religious services on a regular basis.
11	Number	Of hours per week spent conducting worship services.
12	Number	Of UMTs available within the AO.
13	Cost	Of religious services and support provided by contractors.

ART 6.8.2 PROVIDE RELIGIOUS CARE AND COUNSELING

6-119. Provide religious care and specialized counseling skills to soldiers, family members, and authorized civilians (to include contractors) for spiritual comfort, moral support, and spiritual faith and encouragement. (FM 1-05) (USACHCS)

No.	Scale	Measure
01	Yes/No	Religious care and counseling services meet the needs of the supported unit's personnel.
02	Time	For the UMT to receive a request for counseling.
03	Time	For individual to be seen by a chaplain.
04	Time	To request chaplain detachments A/B to perform counseling.

No.	Scale	Measure
05	Time	To coordinate for a chapel or office to provide religious care and counseling.
06	Time	To coordinate transportation to enable UMTs to get to required locations to provide religious care and counseling.
07	Time	To plan and prepare for religious care and counseling.
08	Percent	Of soldiers seen who require follow-up counseling.
09	Number	Of soldiers seen who require follow-up counseling.
10	Number	Of hours per week spent providing religious care and counseling.
11	Number	Of UMTs available within the AO.

ART 6.8.3 ADVISE ON RELIGIOUS, MORAL, AND ETHICAL ISSUES

6-120. Advise the command on the religious, moral, and ethical climate within units and the AO. (FM 1-05) (USACHCS)

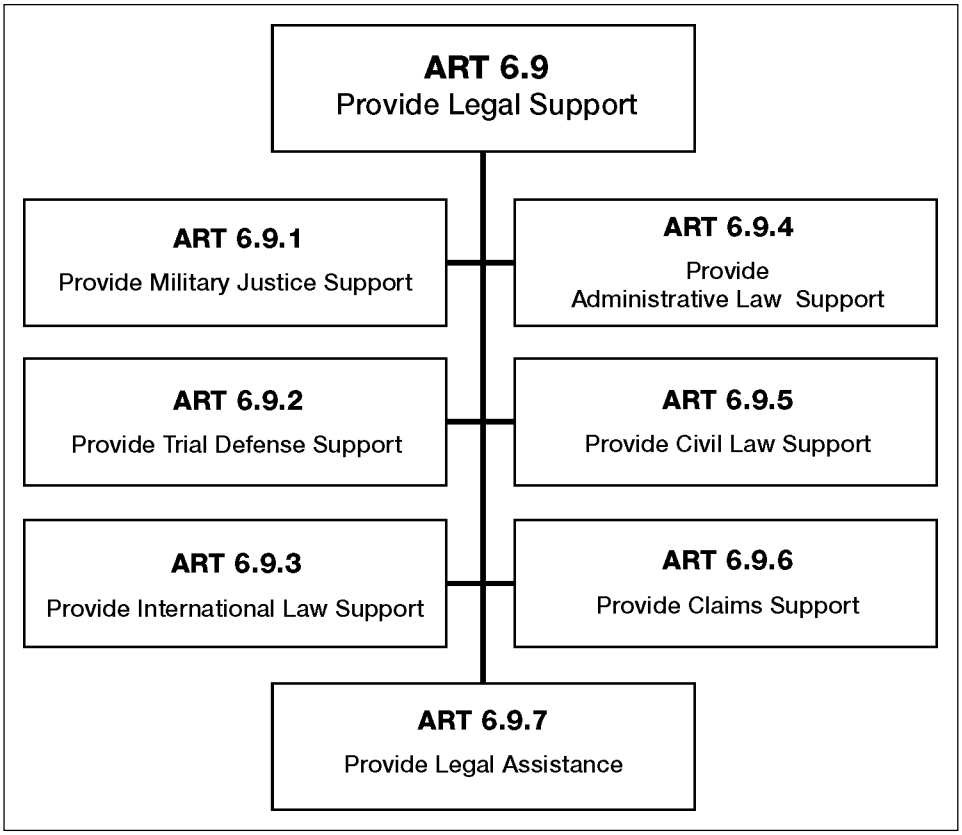
No.	Scale	Measure
01	Yes/No	The commander knows the current religious, moral, and ethical climate within his unit and the AO.
02	Time	Spent advising the commander on religious, moral, and ethical issues.
03	Time	Spent advising individuals on religious, moral, and ethical issues.
04	Time	To assess moral and ethical climate of a unit.
05	Time	To conduct moral and ethical training.
06	Time	Spent coordinating for a chapel, office, or classroom to provide moral and ethical training.
07	Time	To coordinate transportation to enable UMTs to get to required locations to provide moral and ethical issues.
08	Percent	Of requested counseling performed by chaplain detachments A/B.
09	Number	Of UMTs available within the AO.
10	Number	Of hours per week spent advising on religious, moral, and ethical issues.

ART 6.8.4 CONDUCT RELIGIOUS SUPPORT ACTIVITY TRAINING

6-121. Conduct religious support activity training in support of units as required by command. Religious support activities include religious services; rites, sacraments and ordinances; pastoral care and counseling; religious education; family life ministry; institutional ministry; professional support to the commander and staff; management and administration; religious and humanitarian support; religious support planning and operations; religious support to training. (FM 1-05) (USACHCS)

No.	Scale	Measure
01	Yes/No	Spiritual fitness training meets the needs of the command.
02	Time	To conduct spiritual fitness training.
03	Time	To assess the effectiveness of religious support activity training.
04	Time	Spent coordinating for the use of a chapel, office, or classroom to conduct religious support activity training.

No.	Scale	Measure
05	Time	To coordinate transportation to enable UMTs to get to required locations to provide moral and ethical issues.
06	Percent	Of religious support activity training provided by chaplain detachments A/B.
07	Number	Of UMTs operational within AO.



SECTION IX – ART 6.9: PROVIDE LEGAL SUPPORT

6-122. Provide operational law support in all legal disciplines (including military justice, international law, administrative law, civil law, claims, and legal assistance) in support of the command, control, and sustainment of operations. (FM 27-100) (TJAGSA)

Note: ART 7.4.5 (Provide Operational Law Support) and ART 7.7.2.1 (Provide Military Justice Support) are included in ART 7.0 (Command and Control Battlefield Operating System).

No.	Scale	Measure
01	Yes/No	Legal support services enhance the supported unit's ability to accomplish its mission.

No.	Scale	Measure
02	Time	To refine the legal services program for the AO after receipt of warning order.
03	Time	Between commander's requests for and receipt of legal advice or support.
04	Time	To prepare legal estimates.
05	Time	Between requests for briefings on rules of engagement (ROE)/law of war (LOW) and actual presentation of the briefing.
06	Time	To review existing international and interagency agreements.
07	Percent	Of issues correctly identified, analyzed, and resolved to support C2 mission.
08	Percent	Of legal opinions that reflect an accurate view of law.
09	Percent	Of legal opinions that answer the client's questions clearly and concisely.
10	Percent	Of legal opinions in a form that is useful to the client.
11	Percent	Of opinions formatted in compliance with regulatory requirements.
12	Percent	Of opinions that are reviewed by a supervisor before release.
13	Percent	Of deployments requiring augmentation of legal personnel.
14	Percent	Of judge advocates and support personnel with working knowledge of current automated Army information systems.
15	Percent	Of judge advocates with access to automated Army information systems.
16	Percent	Of judge advocates and support personnel with access to Legal Automation Army-Wide System (LAAWS).
17	Percent	Of operationally ready vehicles dedicated to legal support.
18	Percent	Of core legal disciplines provided in support of unit.
19	Percent	Of operational cells with a judge advocate detailed.
20	Percent	Of missions where judge advocate participates in mission analysis.
21	Percent	Of targets reviewed by a judge advocate.
22	Percent	Of entities requiring legal liaison having a designated judge advocate liaison.
23	Percent	Of crisis management team meetings attended by a judge advocate.
24	Percent	Of units/soldiers that receive legal briefings on ROE/LOW, Status of Forces Agreement (SOFA), and host-nation law prior to deployment.
25	Number	Of judge advocates required to provide support in more than one core legal discipline.
26	Number	Of judge advocates required to provide support both in AO and at home station.
27	Number	Of vehicles dedicated for legal support.

ART 6.9.1 PROVIDE MILITARY JUSTICE SUPPORT

6-123. Preside over courts-martial, supervise military judges, promulgate rules of court, and supervise the military magistrate program, to include the review of pretrial confinement, confinement pending the outcome of foreign criminal charges, and the issuance of search, seizure or apprehension authorizations. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Military judges support the accomplishment of the supported unit's mission.
02	Time	Between referral of a case for trial by court-martial and detailing of the military judge.
03	Time	Between referral of a case for trial by court-martial and the arraignment.
04	Time	From pretrial confinement to military magistrate review.
05	Time	Between completion of the record of trial and the military judge's authentication.
06	Percent	Of trials in which the military judge conducts "bridging the gap" mentoring sessions.
07	Percent	Of pretrial confinement cases overruled by the military judge.
08	Percent	Of court decisions overruled by appellate courts.
09	Percent	Of search and seizure authorization later suppressed by the military judge.
10	Percent	Of unit covered by military judge support.
11	Number	Of incidents of noncompliance with rules of court.
12	Number	Of counsel having a copy of the rules of court.

ART 6.9.2 PROVIDE TRIAL DEFENSE SUPPORT

6-124. Provide personal legal advice to soldiers related to criminal allegations; represent soldiers in courts-martial and adverse administrative proceedings. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Accused soldiers' legal rights are protected.
02	Time	Between a soldier's request for and the scheduling of an appointment for legal advice.
03	Time	Between the scheduling of an appointment and the actual appointment date.
04	Percent	Of soldiers electing to retain their detailed or individually requested military counsel.
05	Percent	Of soldiers appearing before administrative boards represented by military counsel.
06	Percent	Of soldiers offered Article 15s who seek advice from the Trial Defense Service.
07	Percent	Of legal issues correctly identified and analyzed.
08	Percent	Of legal opinions that answer clients' questions clearly and concisely.
09	Percent	Of soldiers receiving advice on adverse administrative actions from the Trial Defense Service versus from legal assistance.
10	Percent	Of units covered by Trial Defense Service support.

ART 6.9.3 PROVIDE INTERNATIONAL LAW SUPPORT

6-125. Implement the DOD law of war (LOW) program, including LOW training, advice concerning the application of the LOW (or other humanitarian law) to military operations, the determination of enemy

prisoner of war (EPW) status, and supervision of war crime investigations and trials; assistance with international legal issues relating to U. S. forces overseas, including the legal basis for conducting operations, status of forces agreements, and impact of foreign law on Army activities and personnel. Advise concerning the legal basis for conducting operations and the use of force, advise concerning the legal status of forces, monitor foreign trials and confinement of Army personnel and their family members, perform legal liaison with the International Committee of the Red Cross and host-nation legal authorities, advise concerning legal issues in intelligence operations, security assistance, counterdrug operations, and civil assistance activities. (FM 27-100) (TJAGSA)

No.	*Scale*	*Measure*
01	Yes/No	International law support services enhance the supported unit's ability to accomplish its mission.
02	Time	Between discovery of possible law of war (LOW) violations and reporting to higher headquarters.
03	Time	Between foreign confinement of Army personnel and notification to the US legal liaison.
04	Time	Between reporting of a potential LOW violation and the decision whether to investigate.
05	Time	Between capture of an individual and determination of status under Article 5, GPW.
06	Percent	Of required international agreements on hand.
07	Percent	Of commanders/soldiers who receive legal briefings on ROE/LOW, SOFA, and host-nation law prior to deployment.
08	Percent	Of targets reviewed by a judge advocate.
09	Percent	Of LOW allegations that are reported.
10	Percent	Of foreign trials and confinement of Army personnel and family members that comply with SOFA requirements.
11	Percent	Of international law issues correctly identified, analyzed, and resolved.
12	Percent	Of legal opinions that reflect an accurate view of the law.
13	Percent	Of legal opinions that answer the client's questions clearly and concisely.
14	Percent	Of legal opinions that are reviewed by a supervisor before release.
15	Percent	Of entities requiring legal liaison having a designated judge advocate liaison.
16	Percent	Of orders, plans, and policies reviewed for compliance with international legal obligations.
17	Percent	Of foreign trials observed by a qualified US trial observer.
18	Number	Of US LOW violations.

ART 6.9.4 PROVIDE ADMINISTRATIVE LAW SUPPORT

6-126. Advise commanders and litigate on behalf of the Army concerning military personnel law, government information practices, investigations, relationships with private organizations, labor relations, civilian employment law, military installation, and government ethics. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Administrative law support services enhance the supported unit's ability to accomplish its mission.
02	Time	Between a request for legal review and completion of the review.
03	Percent	Of financial disclosure forms completed and filed on time.
04	Percent	Of request for opinions that are received prior to the legally significant decisions.
05	Percent	Of reports of survey that are not legally sufficient at the second review.
06	Percent	Of potential issues identified prior to mobilization.
07	Percent	Of conscientious objection issues identified prior to deployment.
08	Percent	Of family care plan failure issues identified prior to deployment.
09	Percent	Of personnel requiring ethics training who receive the training.
10	Percent	Of family advocacy case review committee meetings attended by a judge advocate.
11	Percent	Of issues correctly identified, analyzed, and resolved.
12	Percent	Of legal opinions that reflect an accurate view of the law.
13	Percent	Of legal opinions that answer the client's questions clearly and concisely.
14	Percent	Of legal opinions in a form that is useful to the client.
15	Percent	Of opinions formatted in compliance with regulatory requirements.
16	Percent	Of legal opinions that are reviewed by a supervisor before release.
17	Number	Of litigation cases arising from employee grievances, discrimination complaints, and unfair labor practices.

ART 6.9.5 PROVIDE CIVIL LAW SUPPORT

6-127. Provide legal advice and representation for the command concerning the statutes, regulations, and judicial decisions that govern the rights and duties of military organizations and installations with regard to civil authorities. The practice of civil law includes contract law, fiscal law, environmental law, military installations law, regulatory law, intellectual property law, government ethics, and cases within the US Magistrate program and felony prosecution program, as applicable. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Civil law support services enhance the supported unit's ability to accomplish its mission.
02	Time	Between request for procurement legal advice and actual opinion rendered.
03	Time	To review international acquisition agreements.
04	Time	To draft legal opinions on foreign military sales cases.
05	Time	To provide legal opinions on proper use and expenditure of funds.
06	Time	Between requests for briefings on environmental law and actual presentation of the briefings.
07	Time	To review environmental orders.

No.	Scale	Measure
08	Time	To review environmental consent agreements and settlements with federal, state, and local officials.
09	Time	To review contract for legal sufficiency.
10	Percent	Of issues correctly identified, analyzed, and resolved.
11	Percent	Of legal opinions that reflect an accurate view of the law.
12	Percent	Of legal opinions that answer the client's questions clearly and concisely.
13	Percent	Of legal opinions in a form that is useful to the client.
14	Percent	Of opinions formatted in compliance with regulatory requirements.
15	Percent	Of legal opinions that are reviewed by a supervisor before release.
16	Percent	Of plans reviewed to ensure environmental laws are followed.
17	Percent	Of environmental surveys completed within first day of deployment.
18	Percent	Of civil law judge advocates with immediate access to fiscal law codes and regulations.
19	Percent	Of units coordinating with the staff judge advocate on environmental enforcement activities.
20	Percent	Of contracts reviewed by a judge advocate.
21	Number	Of contracts reviewed by a judge advocate.

ART 6.9.6 PROVIDE CLAIMS SUPPORT

6-128. Investigate, process, adjudicate, and settle claims on behalf of and against the United States, IAW statute, regulation, DOD directives, and international or interagency agreements. Categories of claims include claims for property damage of soldiers and employees arising incident to service, torts alleged against Army or DOD personnel acting within the scope of employment, and claims by the United States against individuals who injure Army personnel or damage Army property. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Claims services enhance the supported unit's ability to accomplish its mission.
02	Time	To adjudicate a small claim.
03	Time	To adjudicate a large claim.
04	Time	Between a claimant's request for forms and actual receipt of forms.
05	Time	To investigate personal property claims.
06	Time	To investigate medical malpractice claims.
07	Time	To investigate federal tort claims.
08	Time	Between identification of and approval for payment of ex gratia claims.
09	Time	Between requests for briefings on claims procedures and actual presentations.
10	Time	Between entry into a foreign area and obtaining translation service and local legal advice.
11	Percent	Of claims received with all substantiation included.
12	Percent	Of claims investigated and paid in AO.

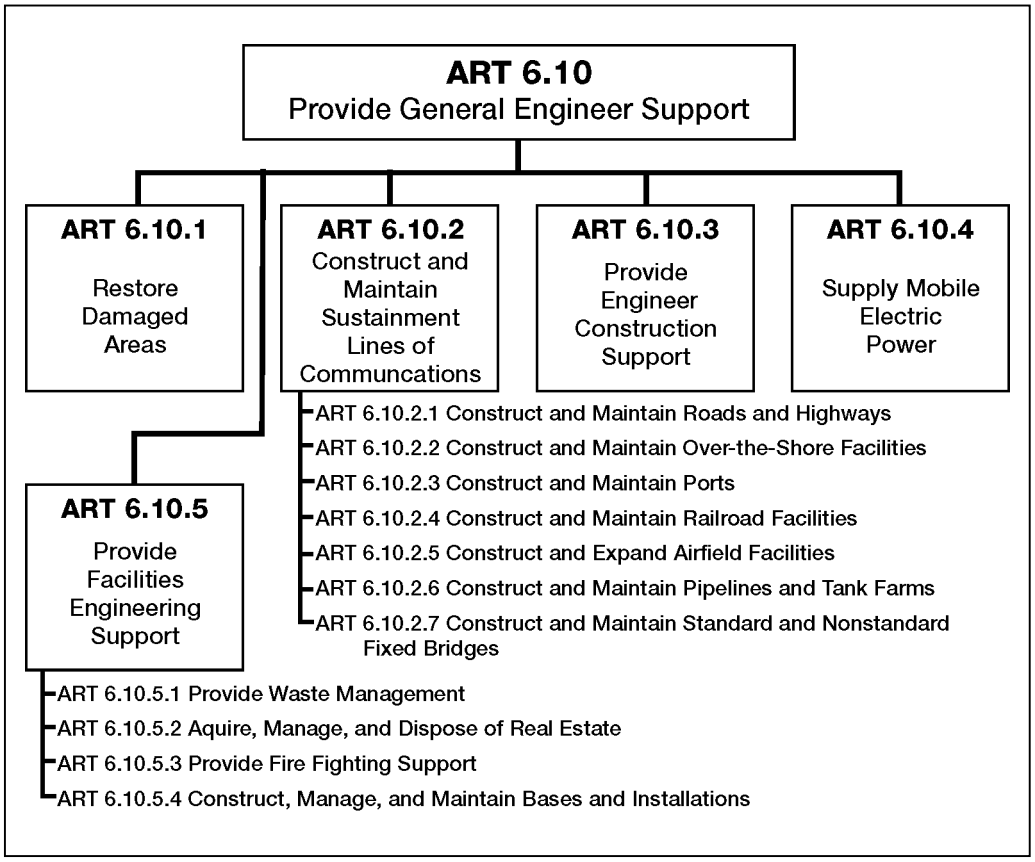
No.	Scale	Measure
13	Percent	Of claims offices with digital cameras.
14	Percent	Of personnel in claims office proficient in the use of a digital camera.
15	Percent	Of claims received for reconsideration.
16	Percent	Of claims adjudicated consistent with law, regulation, and US Army Claims Service policies.
17	Percent	Of units that have appointed unit claims officers.
18	Percent	Of base camps with documentation of preexisting conditions.
19	Percent	Of filed claims paid or transferred prior to redeployment.
20	Percent	Of large personal property claims that are inspected by claims personnel.
21	Number	Of judge advocates in staff judge advocate offices on orders as claims officers.
22	Number	Of claims briefings given prior to deployment.
23	Cost	Of claims resolved in AO within a given time.

ART 6.9.7 PROVIDE LEGAL ASSISTANCE

6-129. Provide personal civil legal services to soldiers, their family members, and other eligible personnel. Provide support to combat readiness exercises, premobilization legal preparation, soldier readiness program processing, demobilization briefings, and noncombatant evacuation operations. Provide federal and state income tax assistance, ministerial and notary services, legal counseling, legal correspondence, negotiation, legal document preparation and filing, limited in-court representation, legal referrals, and mediation. Operate preventive law programs. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Legal assistance services make personnel feel they are appreciated by the Army.
02	Time	Between a request for an appointment and the actual appointment.
03	Time	Between submitting a completed will worksheet and the client's review of the will.
04	Time	Between the client's review of the draft will and the final will signing.
05	Time	Between requests for briefings and actual presentations.
06	Time	Prior to deployment that soldiers receive soldier readiness program packets.
07	Time	Clients wait for notary services.
08	Percent	Of clients whose problems are resolved in one visit.
09	Percent	Of soldiers who use the tax assistance program, versus commercial tax preparation services.
10	Percent	Of attorneys trained to provide trust and estate planning.
11	Percent	Of non-attorneys in staff judge advocate offices authorized to perform notary duties.
12	Percent	Of attorneys authorized to represent clients in civilian court.
13	Percent	Of legal assistance personnel trained on drafting library will programs.
14	Percent	Of units having income tax assistance available.

No.	Scale	Measure
15	Percent	Of wills prepared that include trust and estate planning.
16	Percent	Of legal assistance services that are provided to family members and retirees.
17	Percent	Of client issues correctly identified and resolved.
18	Percent	Of documents written in simple format so that the client can readily understand.



SECTION X – ART 6.10: PROVIDE GENERAL ENGINEER SUPPORT

6-130. Provide construction and acquisition of facilities and transportation routes. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	Quantity or quality of general engineering support within the AO does not degrade or delay unit operations.
02	Time	To construct/restore damaged utilities in AO.
03	Time	To refine general engineer support program for AO after receipt of warning order.
04	Time	To identify and marshal forces, equipment, and material to construct/repair facilities in the AO.

No.	Scale	Measure
05	Time	To construct/repair damaged lines of communications in AO to include aerial ports of debarkation (APODs) and seaports of debarkation (SPODs).
06	Time	Between arrival of building supplies and equipment and construction of sustainment facilities.
07	Time	To complete construction of sustaining base facilities within AO.
08	Time	To initiate construction of facilities (after final project approval and authorization).
09	Time	To have bases identified in operations plan/order operational.
10	Time	To validate asset requests.
11	Time	To have assets at requesting location.
12	Percent	Of facilities adequately maintained.
13	Percent	Difference between planned general engineer support requirements and actual requirements in AO.
14	Percent	Of planned general engineering capability achieved in AO.
15	Percent	Of supplies protected from the elements by weatherproof covers.
16	Percent	Of maintenance facilities protected from the elements.
17	Percent	Of overall cargo and equipment deliveries accommodated by sustaining base.
18	Percent	Of required installation throughput capacity available at execution.
19	Percent	Of tasks correctly assigned (correct engineers/location/time).
20	Percent	Of general engineering support provided by host nation.
21	Number	In square meters of temporary facilities emplaced or constructed per day.
22	Number	In square meters of permanent facilities emplaced or constructed per day.

ART 6.10.1 RESTORE DAMAGED AREAS

6-131. Inspect and repair surface and underwater facilities or restore terrain damaged by combat (e.g., clear rubble and restore electrical power), natural disaster, environmental accidents, or other causes. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	Restoration accomplished IAW the schedule the operations order specifies.
02	Yes/No	Commander of the unit restoring a damaged area plans operations, establishes priorities, and allocates assets.
03	Yes/No	Restoration is according to the standards the operations order specifies.
04	Time	To locate and stockpile repair material.
05	Time	To refine area damage control plan for AO after receipt of warning order.
06	Time	To establish communications between the unit restoring the damaged areas and the unit/organization controlling the AO where the area to be restored is located.

No.	Scale	Measure
07	Time	To perform engineer estimate to identify and prioritize potential tasks and determine required specialized support from engineers, EOD, and other units, bill for needed materials, locate routes, identify replacement facilities, identify available host-nation assets, and perform other tasks as appropriate.
08	Time	To construct an expedient/alternate facility/bypass while restoration/repair is being accomplished if required to maintain operations.
09	Time	To repair facilities damaged by combat or natural disaster.
10	Time	To restore damaged utilities in AO.
11	Percent	Difference between planned area damage control requirements and actual requirements in AO.
12	Percent	Of planned general engineering capability achieved in AO.
13	Percent	Of facilities damaged beyond repair.
14	Percent	Of operations in AO degraded, delayed, or modified due to combat or natural disaster damage.
15	Percent	Of general restoration support provided by host nation.
16	Percent	Of restoration effort completed.
17	Number	Of soldiers and civilians impacted by combat or natural disaster within AO.
18	Number	And type of facilities damaged by combat or natural disaster within AO.

ART 6.10.2 CONSTRUCT AND MAINTAIN SUSTAINMENT LINES OF COMMUNICATIONS

6-132. Construct and maintain land, water, and air routes that connect an operating military force with one or more bases of operations and along which supplies and reinforcements move. Sustainment lines of communications include main and alternate supply routes. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to use lines of communications located within the AO does not degrade or delay unit operations.
02	Yes/No	Unit develops detailed plans for project.
03	Yes/No	Unit inspects project for quality control and ensures that the project is completed on time.
04	Time	To conduct reconnaissance to determine how the local environment will affect construction and determine if there are existing facilities or natural resources available near the construction/maintenance site. This includes determination of: terrain features and their effect on the project, problems involved in traveling to and from work site, what will be needed to keep the job site drained before, during, and after construction, and soil type and effort required to allow vehicle traffic and construction.
05	Time	To coordinate additional personnel, equipment, and critical items.
06	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operations plan/order.

No.	Scale	Measure
07	Time	To plan the project—includes construction estimate, construction directive, and quality control.
08	Time	To prepare construction estimate—includes preparing a project activity list and a construction sequencing network, material/equipment/personnel estimates, determining activity work rates, and preparing critical path.
09	Time	To prepare construction directive and issue it to construction unit. Directive states the exact assignment, project location, start and completion times; specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
10	Time	To monitor construction and conduct quality assurance inspections.
11	Time	To perform final inspection of finished construction and turn it over to the user.
12	Time	To conduct construction/maintenance of sustainment lines of communications.
13	Time	That scheduled arrivals in AO are delayed due to interruption in lines of communication (on average).
14	Percent	Difference between planned and actual requirements for lines of communications construction and maintenance requirements.
15	Percent	Of force becoming casualties due to enemy action or accidents during construction/repair.
16	Percent	Increase in the carrying capability of the line of communication due to construction/maintenance of the line of communication.
17	Percent	Of planned general engineering capability achieved in AO.
18	Percent	Of personnel in AO required to construct and maintain lines of communication.
19	Percent	Of general engineering support provided by host nation.
20	Number	Of lines of communications requiring construction/maintenance in AO.
21	Number	Of instances of delays in scheduled arrivals due to interruption of lines of communication.

ART 6.10.2.1 CONSTRUCT AND MAINTAIN ROADS AND HIGHWAYS

6-133. Determine road network requirements (for example, classify roads in the AO according to location, trafficability, and degree of permanence, traffic-bearing capabilities, improvements needed, etc.). Maintain and repair existing roads (for example, inspect and supervise, stockpile materials, keep road surfaces in usable and safe condition, prompt repair, correct basic cause of surface failure, conduct maintenance inspections, etc.), construct new roads (for example, route reconnaissance, site selection, surveys, drainage, construction, paving (if required), soil stabilization, etc.). (FM 5-104) (USAES)

Note: For construction of combat roads and trails to support maneuver of tactical forces, see ART 5.1.2.1 (Construct/Maintain Combat Roads and Trails).

No.	Scale	Measure
01	Yes/No	An inability to construct or maintain highways and roads within the AO within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Unit develops detailed plans for project.
03	Yes/No	Unit inspects project for quality control and ensures that the road or highway construction project is completed on time.
04	Time	To conduct reconnaissance to determine how the local environment will affect roads and highway construction and determine if there are existing facilities or natural resources available near the construction/maintenance site. This includes determination of: terrain features and their effect on the project, problems involved in traveling to and from work site, what will be needed to keep the job site drained before, during, and after construction, and soil type and effort required to allow vehicle traffic and construction.
05	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operations plan/order.
06	Time	To plan the road or highway project. This includes construction estimate, construction directive, and quality control.
07	Time	To prepare a road or highway construction estimate. This includes preparing a project activity list and a construction sequencing network, material/equipment/personnel estimates, determining work rates for activities, and preparing critical path.
08	Time	To prepare road or highway construction directive and issue it to construction unit. Directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
09	Time	To coordinate additional personnel, equipment, and critical items.
10	Time	To monitor construction and conduct quality assurance inspections.
11	Time	To perform final inspection of finished road or highway and turn it over to the user.
12	Time	To conduct construction/maintenance of roads and highways.
13	Time	That scheduled arrivals in AO are delayed on the average due to interruptions in roads and highways by combat actions or natural disasters.
14	Percent	Difference between planned and actual requirements for road and highway construction and maintenance requirements.
15	Percent	Of force becoming casualties due to enemy action or accidents during road and highway construction/repair.
16	Percent	Increase in the carrying capability of a road or highway due to construction/maintenance.
17	Percent	Of planned road/highway construction/maintenance capability achieved in AO.
18	Percent	Of personnel in AO required to construct and maintain roads and highways.

No.	Scale	Measure
19	Percent	Of road/highway construction/repair capability provided by host nation.
20	Percent	Of existing roads and highways in AO improved.
21	Percent	Of roads and highways in AO that can be used in their current condition by unit combat and tactical vehicles.
22	Percent	Of unit operations degraded, delayed, or modified in AO due to road/ highway impassability.
23	Percent	Of roads/highways within the AO damaged by enemy fire or natural disaster.
24	Number	Of roads and highways within the AO requiring construction/maintenance in AO.
25	Number	Of roads and highways constructed/improved within the AO.
26	Number	Of kilometers of roads and highways constructed/improved within the AO within a given time.
27	Number	Of instances of delays in scheduled arrivals due to interruption of roads and highways within the AO by combat actions or natural disaster.
28	Number	Of instances in which troop movement or sustaining operations were prevented due to road/highway impassability.
29	Number	Of road/highway maintenance inspections conducted per month within the AO.

ART 6.10.2.2 CONSTRUCT AND MAINTAIN OVER-THE-SHORE FACILITIES

6-134. Give construction, repair, and maintenance support to logistics over-the-shore operations. Construct piers and causeways. Prepare and stabilize beaches. Construct access and egress routes. Provide access to marshalling and storage areas and adjoining logistics over-the-shore sites, which may also need constructing. Provide road and rail links to existing lines of communications. Construct utility systems and petroleum, oil, and lubricants (POL) storage and distribution systems. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to construct or maintain over-the-shore facilities within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Unit develops detailed plans for project.
03	Yes/No	Unit inspects over-the-shore facility projects for quality control and ensures that the project is completed on time.
04	Time	To conduct reconnaissance to determine how the local environment will affect over-the-shore facilities construction and determine if there are existing facilities or natural resources available near the construction/maintenance site. This includes determination of: terrain features and their effect on the project, problems involved in traveling to and from work site, what will be needed to keep the job site drained before, during, and after construction, and soil type and effort required to allow vehicle traffic and construction.
05	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operations plan/order.

No.	Scale	Measure
06	Time	To plan the over-the-shore facility project. This includes construction estimate, construction directive, and quality control.
07	Time	To prepare a construction estimate for the over-the-shore facility. This includes preparing a project activity list and a construction sequencing network, material/equipment/personnel estimates, determining work rates for activities, and preparing critical path.
08	Time	To prepare construction directive for the over-the-shore facility and issue it to the construction unit. Directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
09	Time	To coordinate additional personnel, equipment, and critical items.
10	Time	To monitor construction and conduct quality assurance inspections.
11	Time	To perform final inspection of finished over-the-shore facility and turn it over to the user.
12	Time	To construct/maintain over-the-shore facilities.
13	Time	That scheduled arrivals in AO are delayed (on average) due to interruptions in the construction/maintenance of over-the-shore facilities by combat actions or natural disasters.
14	Percent	Difference between planned and actual requirements for the construction or maintenance of over-the-shore facilities within the AO.
15	Percent	Of force that becomes casualties due to enemy action or accidents during the construction or maintenance of over-the-shore facilities.
16	Percent	Increase in the throughput capability of a surface port due to the construction or maintenance of over-the-shore facilities.
17	Percent	Of planned construction/maintenance capability for over-the-shore facilities achieved in AO.
18	Percent	Of personnel in AO required to construct and maintain over-the-shore facilities.
19	Percent	Of over-the-shore facilities within the AO damaged by enemy fire or natural disaster.
20	Percent	Of over-the-shore facilities in AO that can be used in their current condition.
21	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing over-the-shore facilities.
22	Percent	Of over-the-shore construction/repair capability provided by host nation.
23	Percent	Of existing over-the-shore facilities improved in AO.
24	Percent	Of existing logistics over-the-shore facilities connected to existing roads/pipelines/railroads.
25	Percent	Of supplies lost or destroyed during logistics over-the-shore offload activities within the AO.
26	Number	Of over-the-shore facilities within the AO requiring construction/ maintenance.

No.	Scale	Measure
27	Number	And types of over-the-shore facilities, such as piers, causeways, and marshaling/storage sites, constructed/improved within the AO.
28	Number	And types of over-the-shore facilities within the AO damaged by enemy fire or natural disaster.
29	Number	Of meters of piers, causeways, and beaches constructed/improved/stabilized within the AO within a given time.
30	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of over-the-shore facilities within the AO by combat actions or natural disaster.
31	Number	Of instances troop movement or sustaining operations were prevented due to an inability to use over-the-shore facilities.
32	Number	Of port facility inspections conducted per month within the AO.

ART 6.10.2.3 CONSTRUCT AND MAINTAIN PORTS

6-135. Construct and rehabilitate ship unloading and cargo handling facilities in the AO. Repair and maintenance can include emergency repair, major repair, rehabilitation of breakwater structures, and expedients. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to construct or maintain seaport facilities within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Unit develops detailed plans for project.
03	Yes/No	Unit inspects seaport projects for quality control and ensures that the project is completed on time.
04	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operations plan/order.
05	Time	To plan the seaport construction project. This includes construction estimate, construction directive, and quality control.
06	Time	To conduct reconnaissance to determine how the local environment will affect the construction and maintenance of seaports. This includes determining if there are existing facilities or natural resources available near the work site, terrain features and their effect on the project, problems involved in traveling to and from work site, what will be needed to keep the job site drained before, during, and after construction, and soil type and effort required to allow vehicle traffic/construction.
07	Time	To coordinate additional personnel, equipment, and critical items.
08	Time	To monitor construction and conduct quality assurance inspections.
09	Time	To perform final inspection of finished seaport and turn it over to the user.
10	Time	To construct/maintain port facilities.
11	Time	To prepare a construction estimate for the seaport. This includes preparing a project activity list and a construction sequencing network, material/equipment/personnel estimates, determining work rates for activities, and preparing critical path.

No.	Scale	Measure
12	Time	To prepare construction directive for the seaport and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
13	Percent	Difference between planned and actual requirements for the construction or maintenance of port facilities within the AO.
14	Percent	Of force that become casualties due to enemy action or accidents during the construction or maintenance of port facilities.
15	Percent	Increase in the throughput capability of a surface port due to the construction or maintenance of port facilities.
16	Percent	Of planned construction/maintenance capability for port facilities achieved in AO.
17	Percent	Of personnel in AO required to construct and maintain port facilities.
18	Percent	Of port construction/repair capability provided by host nation.
19	Percent	Of existing port facilities improved in AO.
20	Percent	Of port facilities in AO that can be used in their current condition.
21	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing port facilities.
22	Percent	Of port facilities within the AO damaged by enemy fire or natural disaster.
23	Percent	Of existing logistic port facilities connected to existing roads/pipelines/railroads.
24	Percent	Of supplies lost or destroyed during logistic offload activities within the AO.
25	Number	Of port facilities within the AO requiring construction/maintenance.
26	Number	And types of port facilities, such as piers, causeways, cranes, and marshaling/storage sites, constructed/improved within the AO.
27	Number	And types of port facilities within the AO damaged by enemy fire or natural disaster.
28	Number	Of meters of breakwater, piers, and causeways, constructed/improved within the AO within a given time.
29	Number	Of port facility inspections conducted per month within the AO.
30	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of port facilities within the AO by combat actions or natural disaster.
31	Number	Of instances in which troop movement or sustaining operations were prevented due to an inability to use port facilities.

ART 6.10.2.4 CONSTRUCT AND MAINTAIN RAILROAD FACILITIES

6-136. Provide construction, major rehabilitation, and major repair of railroads. ART 6.10.2.4 includes all design, new construction, and modification of existing railroads to meet military traffic needs. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to construct or maintain railroad facilities within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Unit develops detailed plans for project.
03	Yes/No	Unit inspects railroad projects for quality control and ensures that the project is completed on time.
04	Time	To conduct reconnaissance to determine how the local environment will affect the construction and maintenance of railroad facilities. This includes determining if there are existing facilities or natural resources available near the work site, terrain features and their effect on the project, problems involved in traveling to and from work site, what will be needed to keep the job site drained before, during, and after construction, and soil type and effort required to allow vehicle traffic/construction.
05	Time	To review available information in construction directive, intelligence reports, and site investigation to develop an operations plan/order.
06	Time	To plan the railroad facility construction project—includes construction estimate, construction directive, and quality control.
07	Time	To prepare a construction estimate for railroad facilities. This includes preparing a project activity list and a construction sequencing network, material/equipment/personnel estimates, determining work rates for activities, and preparing critical path.
08	Time	To prepare construction directive for the railroad facility and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
09	Time	To coordinate additional personnel, equipment, and critical items.
10	Time	To monitor construction and conduct quality assurance inspections.
11	Time	To perform final inspection of finished railroad facilities and turn it over to the user.
12	Time	To construct/maintain railroad facilities.
13	Time	That scheduled arrivals in AO are delayed (on average) due to interruptions in the construction/maintenance of railroad facilities by combat actions or natural disasters.
14	Percent	Difference between planned and actual requirements for the construction or maintenance of railroad facilities within the AO.
15	Percent	Of force that become casualties due to enemy action or accidents during the construction or maintenance of railroad facilities.
16	Percent	Increase in the throughput capability of a railroad port due to the construction or maintenance of railroad facilities.
17	Percent	Of planned construction/maintenance capability for railroad facilities achieved in AO.
18	Percent	Of personnel in AO required to construct and maintain railroad facilities.
19	Percent	Of railroad construction/repair capability provided by host nation.
20	Percent	Of existing railroad facilities improved in AO.
21	Percent	Of railroad facilities in AO that can be used in current condition.

No.	Scale	Measure
22	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing railroad facilities.
23	Percent	Of railroad facilities within the AO damaged by enemy fire or natural disaster.
24	Percent	Of existing logistic facilities connected to existing railroads.
25	Number	Of railroad facilities within the AO requiring construction/maintenance.
26	Number	And types of railroad facilities constructed/improved within the AO.
27	Number	And types of railroad facilities within the AO damaged by enemy fire or natural disaster.
28	Number	Of kilometers of rail lines constructed/improved within the AO within a given time.
29	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of railroad facilities within the AO by combat actions or natural disaster.
30	Number	Of instances in which troop movement or sustaining operations were prevented due to an inability to use rail facilities.
31	Number	Of tons per day of supplies transported.
32	Number	Of railroad facility inspections conducted per month within the AO.

ART 6.10.2.5 CONSTRUCT AND EXPAND AIRFIELD FACILITIES

6-137. Provide for planning military airfields; new airfield and heliport construction, expansion and rehabilitation; and maintenance and repair of airfields and heliports in the AO. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to construct or expand airfield facilities within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Airfield facilities constructed can support the aircraft for which they were designed.
03	Yes/No	Unit inspects airfield/helipad projects for quality control.
04	Yes/No	Airfield/helipad project completed on time.
05	Time	To prepare engineer construction estimate that determines the effort to meet the requirements, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.
06	Time	To prepare construction directive for the airfield/helipad and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
07	Time	To perform reconnaissance and evaluate the site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.
08	Time	To coordinate for and receive engineer assets to perform task.

No.	Scale	Measure
09	Time	To monitor construction and conduct quality assurance inspections.
10	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
11	Time	To perform construction layout survey.
12	Time	To perform earthwork estimation that calculates the earthwork volume or quantity, determine final grade, balancing of cuts and fills, and determine most economical haul of material.
13	Time	To design a storm-drainage system.
14	Time	To conduct clearing, grubbing, and stripping operations.
15	Time	To conduct subgrade and base-course operations.
16	Time	To stabilize soil and provide dust control if required.
17	Time	To install surface matting, if required.
18	Time	To conduct airfield marking operations.
19	Time	To install airfield lighting.
20	Time	To mark all obstructions.
21	Time	To prepare and submit status/progress/completion reports to higher headquarters.
22	Time	To establish job site security.
23	Time	That scheduled arrivals in AO are delayed on the average due to interruptions in the construction/expansion/maintenance of airfield/helipad facilities by combat actions or natural disasters.
24	Percent	Difference between planned and actual requirements for the construction or maintenance of airfields/helipads and their associated support facilities within the AO.
25	Percent	Of force becoming casualties due to enemy action or accidents during the construction or maintenance of airfields/helipads.
26	Percent	Increase in the throughput capability of an airfield/heliport due to the construction or maintenance of aviation support facilities.
27	Percent	Of planned airfield/helipad construction/maintenance capability achieved.
28	Percent	Of personnel in AO required to construct and maintain airfields, heliports, and their associated aviation support facilities.
29	Percent	Of airfield/helipad construction/repair capability provided by host nation.
30	Percent	Of existing airfields/helipads and their associated aviation support facilities improved in AO.
31	Percent	Of existing airfields/helipads and their associated aviation support facilities in AO that can be used in their current condition.
32	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing airfields/helipads.
33	Percent	Of airfield/helipad and aviation support facilities within the AO damaged by enemy fire or natural disaster.
34	Percent	Of existing logistic facilities with access to existing airfields/helipads.
35	Number	Of airfields constructed, expanded, or rehabilitated within the AO.
36	Number	Of heliports constructed/rehabilitated in AO.

No.	Scale	Measure
37	Number	Of airfields/helipads and aviation support facilities within the AO requiring construction/maintenance.
38	Number	And types of airfields/helipads and associated aviation support facilities within the AO damaged by enemy fire or natural disaster.
39	Number	Of meters of airfield runway constructed/improved/repaired within the AO within a given time.
40	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of airfields and helipads within the AO by combat actions or natural disaster.
41	Number	Of instances in which troop movement or sustaining operations were prevented due to an inability to use airfields/helipads and associated aviation support facilities.
42	Number	Of tons per day of supplies transported by aviation platforms within the AO.
43	Number	Of passengers per day transported by aviation within the AO.
44	Number	Of inspections of aviation support infrastructure conducted per month within the AO.

ART 6.10.2.6 CONSTRUCT AND MAINTAIN PIPELINES AND TANK FARMS

6-138. Provide construction, major rehabilitation, and major repair of water and petroleum pipelines and tank farms. ART 6.10.2.6 includes all design, new construction, and modification of existing pipelines and tank farms to meet military traffic needs. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to construct and maintain pipelines and tank farms within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Size of storage tanks/tank farm is adequate for anticipated demand.
03	Yes/No	The system constructed according to plans and specifications.
04	Yes/No	The system operational and leakproof.
05	Yes/No	Buried pipes are below frost line and sufficiently deep that vehicle movement will not damage system.
06	Yes/No	Environmental regulations observed during construction/repair of petroleum distribution systems.
07	Time	To perform reconnaissance to evaluate the site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.
08	Time	To prepare engineer construction estimate that determines the effort needed to meet the requirements, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.

No.	Scale	Measure
09	Time	To prepare construction directive for the pipeline or tank farm and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
10	Time	To coordinate for and receive engineer assets to perform task.
11	Time	To monitor construction and conduct quality assurance inspections.
12	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
13	Time	To perform construction layout survey.
14	Time	To perform earthwork estimation that calculates the earthwork volume or quantity, determine final grade, balancing of cuts and fills, and determine most economical haul of material.
15	Time	To excavate trenches IAW construction/repair plans.
16	Time	To lay pipe, make connections, install valves, and conduct pressure tests.
17	Time	To conduct backfill and tamping operations.
18	Time	To construct pipeline supports and bracing for locations where the pipeline must be above ground.
19	Time	To construct pipeline suspension bridges for locations where the pipeline must be above ground.
20	Time	To install pipeline pumping stations.
21	Time	To ensure water distribution system functions properly.
22	Time	To install storage tanks/liquid storage facilities.
23	Time	To install underwater pipeline.
24	Percent	Difference between planned and actual requirements for water and petroleum pipelines and tank farms within an AO.
25	Percent	Of planned construction/repair program completed.
26	Number	Of pipelines constructed, expanded, or rehabilitated within the AO.
27	Number	Of tank farms constructed/rehabilitated in AO.
28	Number	Of kilometers of pipelines and tank farms within the AO required to support unit operations.
29	Number	Of pipelines and tank farms and associated support facilities within the AO damaged by enemy fire or natural disaster.
30	Number	Of meters of pipeline constructed/improved/repaired within the AO within a given time.
31	Number	Of liters/metric tons of water/bulk petroleum products currently stored in tank farms within the AO.
32	Number	Of instances in which troop movement or sustaining operations were prevented due to lack of water/bulk petroleum products.
33	Number	Of liters/metric tons of supplies transported per day by pipelines within the AO.
34	Number	Of pipeline/tank/pumping station inspections conducted per month within the AO.

No.	Scale	Measure
35	Number	Of casualties as a result of accidents during the construction/repair/maintenance of pipelines and tank farms.
36	Number	Of incidents that result in the release of hazardous material as a result of accidents/spills resulting from combat actions.
37	Number	Of liters/metric tons of hazardous material released.
38	Number	Of water wells drilled within AO.

ART 6.10.2.7 CONSTRUCT AND MAINTAIN STANDARD AND NONSTANDARD FIXED BRIDGES

6-139. Provide construction and repair of bridges. ART 6.10.2.7 includes all design, new construction, and modification of existing bridges to meet military traffic needs. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	An inability to construct and maintain standard and nonstandard fixed bridges within the time the construction directive specifies does not degrade or delay unit operations.
02	Yes/No	Fixed bridges can support the traffic loads for which they were designed.
03	Yes/No	Unit inspects fixed bridge projects for quality control.
04	Yes/No	Bridge construction projects completed on time.
05	Time	To prepare engineer construction estimate that determines the effort needed to meet gap crossing requirements, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.
06	Time	To perform reconnaissance to evaluate proposed bridge site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.
07	Time	To adapt standard fixed bridge construction designs to specific situation.
08	Time	To coordinate for and receive engineer assets to perform task.
09	Time	To prepare construction directive/operation order for the construction/maintenance of a fixed bridge. This directive states exact assignment, project location, start/completion times, specifies additional personnel, equipment, and/or materials available, project priority, type and frequency of construction reports, time needed for special procurement, and required coordination with user agency.
10	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
11	Time	To monitor construction and conduct quality assurance inspections.
12	Time	To perform construction layout survey.
13	Percent	Difference between planned and actual requirements for fixed bridge construction or maintenance within the AO.
14	Percent	Of force becoming casualties due to enemy action or accidents during the construction or maintenance of fixed bridges.
15	Percent	Increase in the throughput capability of a line of communication/main supply route because of the replacement of tactical assault bridges with fixed bridges.

No.	Scale	Measure
16	Percent	Of planned fixed bridge construction/maintenance capability achieved in AO.
17	Percent	Of personnel in AO required to construct and maintain fixed bridges.
18	Percent	Of fixed bridge construction/repair capability provided by host nation.
19	Percent	Of existing fixed bridges repaired or improved in AO.
20	Percent	Of existing fixed bridges in AO that can be used in current condition.
21	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing fixed bridges.
22	Percent	Of fixed bridges within the AO damaged by enemy fire or natural disaster.
23	Percent	Of tactical assault bridging within AO replaced by fixed bridges.
24	Number	Of fixed bridge kits available for employment within the AO.
25	Number	Of fixed bridges constructed, improved, or rehabilitated within the AO.
26	Number	Of existing fixed bridges within the AO requiring maintenance/repair.
27	Number	And types of fixed bridges within the AO damaged by enemy fire or natural disaster.
28	Number	Of meters of gaps crossed by fixed bridges constructed/improved/repaired within the AO within a given time.
29	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of fixed bridges within the AO by combat actions or natural disaster.
30	Number	Of instances in which troop movement or sustaining operations were prevented due to an inability to use a fixed bridge.
31	Number	Of tons per day of bridge construction supplies required within the AO.
32	Number	Of inspections of fixed bridges conducted per month within the AO.

ART 6.10.3 PROVIDE ENGINEER CONSTRUCTION SUPPORT

6-140. Construct or renovate facilities. ART 6.10.3 includes construction of marshalling, distribution, and storage facilities; construction/renovation of fixed facilities; construction, repair, maintenance, and operation of permanent and semi-permanent water facilities, such as wells for water; and dismantling fortifications. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	Engineer construction support provided assists the supported unit in accomplishing its mission within the AO.
02	Time	To refine general engineering service program for AO after receipt of warning order.
03	Time	To prepare engineer construction estimate that determines the effort needed to meet the requirements, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.
04	Time	To perform reconnaissance to evaluate the site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.

No.	Scale	Measure
05	Time	To prepare construction directive for the construction or renovation of fixed facilities and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
06	Time	To coordinate for and receive engineer assets to perform task.
07	Time	To monitor construction and conduct quality assurance inspections.
08	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
09	Time	To perform construction layout survey.
10	Time	To develop concept of engineer construction support after receipt of warning order.
11	Time	Between arrival of building supplies and equipment and construction of sustainment facilities within the AO.
12	Percent	Difference between planned construction report requirements and actual requirements within the AO.
13	Percent	Of planned engineer construction support capability achieved in AO.
14	Percent	Of engineer construction support provided by host nation.
15	Percent	Of engineer construction projects damaged by combat action or natural disaster.
16	Percent	Of facilities adequately maintained.
17	Percent	Of permanent facilities emplaced or constructed.
18	Number	Of water wells drilled in AO.
19	Number	Of storage facilities constructed in AO.
20	Number	Of pipelines constructed in AO.
21	Number	Of fixed facilities constructed/renovated in AO.
22	Number	Of square meters of temporary storage facilities emplaced or constructed per day.

ART 6.10.4 SUPPLY MOBILE ELECTRIC POWER

6-141. Supply electric power generation and distribution to military units through mobile generation and a tactical distribution grid system. ART 6.10.4 includes power production, power distribution, and power management. (FM 5-422) (USAES)

No.	Scale	Measure
01	Yes/No	Mobile electric power meets users' needs.
02	Yes/No	Electrical system constructed and power generation and regulation devices installed IAW operation order specifications and within the time the directive states.
03	Yes/No	Mobile electric power systems adhere to local and national electric code specifications.

No.	Scale	Measure
04	Time	To refine mobile electric power service program for AO after receipt of warning order.
05	Time	To prepare engineer construction estimate that determines the effort needed to meet the requirements, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.
06	Time	To perform reconnaissance to evaluate the site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.
07	Time	To prepare construction directive for a facility to house mobile electric power generators, power grid substations/transformers, and/or electric power lines and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
08	Time	To coordinate for and receive engineer assets to perform task.
09	Time	To monitor construction and conduct quality assurance inspections.
10	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
11	Time	To perform construction layout survey.
12	Time	To verify accuracy of construction plans and specifications to include ensuring that the bill of materials includes all required materials to complete construction.
13	Time	To rough in the structure to accommodate electrical service.
14	Time	To install cable and/or conduit.
15	Time	To complete installation by connecting joints, grounding system at service entrance, connecting bonding circuit, attaching wire to switch terminal, ceiling and wall outlets, fixtures, and devices, and connecting service entrance cable and fusing or circuit breaker panels.
16	Time	To test and repair the system.
17	Percent	Difference between planned mobile electric power requirements and actual requirements within the AO.
18	Percent	Of planned mobile electric power generation and distribution capability achieved within the AO.
19	Percent	Of units in AO that require mobile power generation.
20	Percent	Of electrical power in AO generated by mobile generation units and distributed through a tactical grid.
21	Percent	Of electrical power in AO provided by existing power generation facilities and distributed through a commercial grid.
22	Percent	Of power generation systems operational.
23	Percent	Of required kilowatt hours provided by mobile generation units.
24	Percent	Of power provided within AO that meets voltage, frequency, and amperage standards.

No.	Scale	Measure
25	Number	And types of mobile generation systems required to meet user requirements.
26	Number	Of kilometers of electric power lines that form the tactical grid within the AO.
27	Number	Of substations and transformers required by the tactical grid.

ART 6.10.5 PROVIDE FACILITIES ENGINEERING SUPPORT

6-142. Sustain military forces in the theater through the provision of waste management; acquisition, maintenance, and disposal of real property; provision of fire fighting support; and construction, management, and maintenance of bases and installations. ART 6.10.5 includes the design of facilities. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	The provision of facilities engineering support does not cause the abandonment, modification, or delay in execution of the unit's chosen course of action.
02	Yes/No	Facility systems constructed to plan specifications within allotted time.
03	Yes/No	Facility engineering systems safeguard the health of soldiers and noncombatants within the AO.
04	Time	To refine facilities engineering support program within AO.
05	Time	To perform reconnaissance to evaluate the site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.
06	Time	To prepare construction directive for facility engineering support facilities and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
07	Time	To coordinate for and receive engineer assets to perform facility engineer task.
08	Time	To monitor construction and conduct quality assurance inspections.
09	Time	To verify accuracy of construction plans and specifications to include ensuring that the bill of materials includes all required materials to complete construction.
10	Time	To design new construction requirements.
11	Time	To manage and administer facilities engineering program within AO.
12	Time	To develop guidance for the acquisition, management, and disposition of real estate within the AO.
13	Time	To conduct environmental baseline surveys on real estate being considered for acquisition or use by US forces.
14	Time	To inventory installed and personal property located on installations.
15	Time	To maintain facility engineering records.

No.	Scale	Measure
16	Time	To conduct legal and environmental reviews of real estate transactions within the AO.
17	Time	To develop a system for submitting real estate claims within the AO.
18	Percent	Of real estate required to conduct and support unit operations acquired.
19	Percent	Of required real estate and facilities provided by host nation.
20	Percent	Difference between planned and actual requirements for facilities engineering within the AO.
21	Percent	Of planned facilities acquired or constructed in AO.
22	Percent	Of required facilities provided by host nation.
23	Percent	Of existing facilities modernized within the AO.
24	Percent	Of existing facilities that can be used in current condition.
25	Percent	Of existing facilities damaged by combat actions or natural disaster.
26	Percent	Of nonbattle injuries and disease within AO attributable to inadequate facility engineering support.
27	Number	Of kilograms/liters and types of waste, refuse, and hazardous material produced per day within the AO.
28	Number	And types of facilities constructed/acquired to support unit operations.

ART 6.10.5.1 PROVIDE WASTE MANAGEMENT

6-143. Operate, maintain, or upgrade existing utilities. Construct, operate, and maintain new utilities systems for the purpose of waste management. ART 6.10.5.1 includes wastewater collection and treatment systems, refuse collection and disposal. Special consideration is given to the disposal of hazardous waste. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	The supported unit is not delayed, disrupted, or prevented from accomplishing its mission. Soldiers and civilians residing within the AO are not placed at risk of injury or disease because of the improper collection, treatment, and disposal of sewage, refuse, and hazardous waste.
02	Yes/No	Sewer system constructed to plan specifications within allotted time.
03	Yes/No	Waste management facilities safeguard the health of soldiers and noncombatants within the AO.
04	Yes/No	Sewage within AO stabilized so that it does not overload the disposal media in lake, stream, or drain field.
05	Time	To refine waste management program after receipt of warning order.
06	Time	To prepare engineer construction estimate that determines the effort needed to meet the waste management requirements within the AO, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.
07	Time	To perform reconnaissance to evaluate the site for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.

No.	Scale	Measure
08	Time	To prepare construction directive for a sewage/hazardous treatment facility and issue it to the construction unit. This directive states the exact assignment, project location, start and completion times, specifies additional personnel, equipment, and/or materials available, priority for the entire project, type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
09	Time	To coordinate for and receive engineer assets to perform task.
10	Time	To monitor construction and conduct quality assurance inspections.
11	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
12	Time	To perform construction layout survey.
13	Time	To install sheeting and bracing on sewer trenches.
14	Time	To verify accuracy of construction plans and specifications to include ensuring that the bill of materials includes all required materials to complete construction.
15	Time	To install/repair plumbing and sewage pipes in facilities.
16	Time	To install lavatories/sinks, water closet, urinals, etc.
17	Percent	Of sewage/hazardous material produced per day within the AO that are disposed of in a manner that safeguards the health of soldiers and noncombatants within the AO and the environment.
18	Percent	Difference between planned and actual requirements for waste management within the AO.
19	Percent	Of planned waste management capabilities achieved in AO.
20	Percent	Of required waste management capabilities provided by host nation.
21	Percent	Of existing waste management capabilities modernized within the AO.
22	Percent	Of existing waste management capabilities that can be used in their current condition.
23	Percent	Of existing waste management capabilities in AO damaged by combat actions or natural disaster.
24	Percent	Of nonbattle injuries and disease within AO attributable to inadequate waste management.
25	Number	Of kilograms and types of hazardous material produced per day within the AO.
26	Number	Of liters of sanitary sewage produced per day within the AO.
27	Number	Of liters of industrial sewage produced per day within the AO.
28	Number	Of liters of storm sewage produced by individual storms within the AO.
29	Number	Of liters of ground water that enters the sewage system per day.
30	Number	Of cesspools constructed within the AO.
31	Number	And capacity of septic tanks constructed within the AO.
32	Number	And capacity of sewage treatment plants constructed within the AO.
33	Number	Of kilograms/day of disinfectants added to chemically treat sewage within the AO.

No.	Scale	Measure
34	Number	And capacity of sewage lagoons constructed within the AO.
35	Number	Of meters of sewer systems constructed per day within the AO.

ART 6.10.5.2 ACQUIRE, MANAGE, AND DISPOSE OF REAL ESTATE

6-144. Furnish technical real estate guidance and perform additional real estate duties as assigned. (FM 5-100) (USAES)

No.	Scale	Measure
01	Yes/No	The acquisition, management, and disposition of real estate within the AO does not cause the abandonment, modification, or delay in execution of the unit's chosen course of action.
02	Time	To acquire, manage, administer, and dispose of real estate within AO.
03	Time	To develop guidance for the acquisition, management, and disposition of real estate within the AO.
04	Time	To conduct environmental baseline surveys on real estate being considered for acquisition or use by US forces.
05	Time	To inventory installed and personal property located on installations.
06	Time	To maintain real estate records.
07	Time	To conduct legal and environmental reviews of real estate transactions within the AO.
08	Time	To develop a system for submitting real estate claims within the AO.
09	Percent	Of real estate required to conduct and support unit operations acquired.
10	Percent	Of required real estate and facilities provided by host nation.
11	Number	Of real estate teams operational within the AO.
12	Number	Of hectares of real estate acquired, managed, or disposed of within an AO within a given time.
13	Number	Of property claims submitted within AO within a given time.
14	Cost	Of real estate restoration activities necessary to dispose of real estate within the AO.
15	Cost	Of claims for damages to real estate within AO.
16	Cost	Of rent for the use of real estate within AO.

ART 6.10.5.3 PROVIDE FIRE-FIGHTING SUPPORT

6-145. Provide heavy and light equipment to help contain fires. Build firebreaks using engineer equipment and explosives. When available, engineer fire-fighting teams provide fire protection to facilities and airfields. (FM 5-415) (USAES)

No.	Scale	Measure
01	Yes/No	Fire-fighting support limits the damage caused by fires within the AO so that fires do not disrupt, cancel, or require the modification of the unit's course of action.
02	Yes/No	Fire-fighting team can provide first-responder level medical response and assistance to victims.
03	Yes/No	Fire-fighting team can provide an initial response to hazardous material (HAZMAT) incidents.

No.	Scale	Measure
04	Yes/No	Provides C2 of non-firefighting assets used when supporting brush fire-fighting operations.
05	Time	To develop a fire-fighting plan for the AO.
06	Time	To develop mutual aid agreements.
07	Time	To respond to reports of fires, medical emergencies, and HAZMAT incidents.
08	Time	To establish and maintain 24/7 fire department communications network.
09	Time	To conduct reconnaissance of water-supply points.
10	Time	To provide water resupply to fire-fighting teams.
11	Time	To establish local security from external assets for fire-fighting operations.
12	Time	To provide additional manpower support to fire-fighting teams from supported units.
13	Time	To train personnel so they remain qualified to fight fires and respond to medical emergencies and hazardous material incidents.
14	Time	To conduct fire drills by units within the AO.
15	Time	To conduct fire prevention measures, such as inspections, fire extinguisher checks and services, and perform PMCS on fire-fighting equipment.
16	Time	To procure necessary personal protective equipment, fire-fighting equipment, and fire trucks to protect AO.
17	Time	To conduct fire investigations.
18	Percent	Of fire-fighting operations that are POL fires.
19	Percent	Of high value assets protected by fire-fighting teams.
20	Percent	Difference between planned level of fire-fighting support and the required level.
21	Percent	Of qualified personnel assigned to fire-fighting teams in AO.
22	Percent	Of fire-fighting support provided by host nation.
23	Number	Of fire-fighting teams found within the AO.
24	Number	And types of mission capable fire trucks within the AO.
25	Number	Of crash/rescue operations conducted within a given time.
26	Number	Of normal flight and maintenance operations supported within a given time.
27	Number	Of medical evacuation operations supported within a given time.
28	Number	Of fire prevention inspections performed in a given time.
29	Number	Of emergency water-supply points maintained.

ART 6.10.5.4 CONSTRUCT, MANAGE, MAINTAIN BASES AND INSTALLATIONS

6-146. Manage and maintain or upgrade existing facilities and utilities. Construct, manage, and maintain new facilities and utility systems for bases and installations. (FM 5-104) (USAES)

No.	Scale	Measure
01	Yes/No	The construction, management, and maintenance of bases and installations within the AO contribute toward unit mission accomplishment.
02	Yes/No	Construction requirements determined IAW existing doctrine and regulations.
03	Time	To plan maintenance and repair of fixed facilities.
04	Time	To determine potential requirements for repairing damage resulting from combat actions and natural disasters.
05	Time	To plan the operation and maintenance or upgrade of existing utilities, such as electrical generating and distribution systems, waste water collection and treatment systems, and other special utilities systems including cooling and refrigeration, compressed air, and heating systems.
06	Time	To plan and conduct fire prevention and protection programs within the AO.
07	Time	To plan refuse collection and disposal.
08	Percent	Of maintenance and repair of facilities that can be performed by unit self-help teams.
09	Percent	Of facilities within the AO meeting initial and temporary standards.
10	Number	Of incinerators and landfills operating within the AO.
11	Number	Of metric tons of refuse per day that are recycled within the AO.
12	Number	Of metric tons of hazardous waste per day disposed of IAW appropriate laws and regulations.
13	Number	And types of ports, bases, and installations within the AO.
14	Number	Of soldiers supported by bases and installations located within the AO.
15	Number	And types of engineer units used to construct and maintain bases and installations located within the AO.
16	Cost	Of base and installation construction, management, and maintenance.

SECTION XI – ART 6.11: PROVIDE CONTRACTING SUPPORT

6-147. Provide contracting support to obtain/provide supplies, services, and construction in support of operations. Contracting provides a responsive alternative method to increasing support force capability to perform a mission and support all phases of an operation. (FM 100-10-2) (CASCOM)

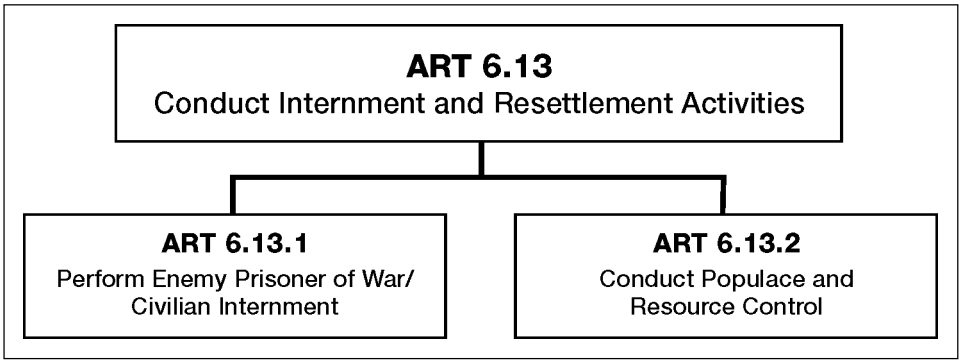
No.	Scale	Measure
01	Yes/No	Contracting support services assist the supported unit in accomplishing its mission.
02	Time	To develop contracting plans and policies.
03	Time	To establish contract office within the AO.
04	Time	To prepare and forward contracting reports.
05	Time	To coordinate legal, resource management, and finance aspects of contracts.
06	Time	To coordinate inspection and quality control of contracted services.
07	Time	To coordinate delivery of contracted service and supplies.

No.	Scale	Measure
08	Time	To provide contract status updates to the principal assistant responsible for contracting and the commander.
09	Time	To cross level contracting assets to meet changes in contracting requirements.
10	Time	To monitor contractor performance.
11	Time	To provide technical advice and assistance to staffs, subordinate units, and contracting officer's representatives.
12	Time	To establish working relationship with contractors and vendors in AO.
13	Percent	Of available time spent monitoring contract administration.
14	Percent	Of contracts that must be coordinated with other agencies, such as staff judge advocate and host nation.
15	Percent	Of contracts executed in time to meet commander's intent.
16	Percent	Of contracted services and supplies provided on time and to standard.
17	Number	Of contracts issued within a given time.
18	Number	Of contracting officers located within the AO and the size of their individual warrants.

SECTION XII – ART 6.12: PROVIDE DISTRIBUTION MANAGEMENT

6-148. Plan and synchronize the time-definite delivery of materiel, equipment, units, personnel, and services to and within the AO. (FM 100-10-1) (CASCOM)

No.	Scale	Measure
01	Yes/No	Inability of the distribution system to get the right supplies to the right unit at the right time does not delay, degrade or prevent unit operations.
02	Time	To set up transportation modes within theater.
03	Percent	Of required items of supply transiting the distribution pipeline.
04	Percent	Of visibility and control maintained over the distribution pipeline within and external to the AO.
05	Percent	Of unit operations delayed, degraded, or modified due to lack of any or all classes of supply.
06	Percent	Flexibility to provide resources from host nation or other agencies.
07	Percent	Retrograde of containers, flat racks, container roll out platforms (CROP) to distribution point.
08	Percent	Of tie down straps, cargo nets, pallets returned with flat racks, CROP, and trailers.
09	Percent	Able to maintain ITV of distribution pipeline, and assets flowing through pipeline.



SECTION XIII – ART 6.13: CONDUCT INTERNMENT AND RESETTLEMENT ACTIVITIES

6-149. ART 6.13 includes activities performed by units when they are responsible for interning enemy prisoners of war and civilian detainees. It ensures the safety and humane treatment of the incarcerated individuals, the maintenance of law and order within the facilities, as well as the safety of the guards and the surrounding civilian and military facilities and installations. (FM 3-19.40) (USAMPS)

No.	*Scale*	*Measure*
01	Yes/No	Conduct of internment and resettlement activities does not prevent or seriously interfere with accomplishment of the unit's primary tactical mission.
02	Yes/No	Operations of US forces conducting internment and resettlement activities observe international laws of war, US laws and regulations, rules of engagement, US-host nation agreements.
03	Yes/No	Operations of US forces conducting internment and resettlement activities observe local customs, mores, and taboos where possible.
04	Yes/No	Enemy prisoners of war and civilian detainees receive necessary food, water, clothing, housing, and medical care.
05	Time	To refine plans for the collection and internment of enemy prisoners of war and civilian detainees.
06	Time	To establish dislocated civilian collection points.
07	Time	To construct camps to house enemy prisoners of war and civilian detainees.
08	Time	To develop and enforce internment and resettlement control measures, such as curfew, travel permits, and lists of controlled supplies and contraband.
09	Time	To plan and prepare resettlement sites.
10	Time	To forward intelligence information collected to unit intelligence staff.
11	Percent	Of interned enemy prisoners of war requiring medical treatment.
12	Percent	Of friendly force personnel in AO involved in maintaining enemy prisoner of war camps and civilian detainment facilities.
13	Percent	Of civilian detainees released after interrogation.
14	Percent	Of unit CSS requirements provided by prisoners of war.

No.	Scale	Measure
15	Percent	Of unit sustainment capabilities needed to support internment and resettlement program.
16	Number	Of civilian detainees/displaced civilians who can be resettled within a given time.
17	Number	Of civilian detainees.
18	Number	And types of class X and other supplies needed to support internment and resettlement program.
19	Number	Of enemy prisoners of war housed.
20	Number	Of facilities to house civilian detainees established.
21	Number	Of enemy prisoners of war camps established.
22	Number	Of resettlement sites established.
23	Ratio	Of guards to enemy prisoners of war.

ART 6.13.1 PERFORM ENEMY PRISONERS OF WAR/CIVILIAN INTERNMENT

6-150. Provide safe and humane treatment for enemy prisoners of war and detained civilians. This task includes the collection, screening, processing, evacuation, internment, safeguarding, and release of enemy prisoners of war and civilian detainees. ART 6.13.1 takes place in temporary and long-term facilities/points. (FM 3-19.40) (USAMPS)

No.	Scale	Measure
01	Yes/No	Conduct of internment activities does not prevent or seriously interfere with accomplishment of the unit's primary tactical mission.
02	Yes/No	Operations of US forces conducting internment activities observe international laws of war, US laws and regulations, rules of engagement, and US-host nation agreements.
03	Yes/No	Operations of US forces conducting internment activities observe local customs, mores, and taboos where possible.
04	Yes/No	Enemy prisoners of war and civilian detainees receive necessary food, water, pay, clothing, housing, and medical care.
05	Time	To refine plans for the internment of enemy prisoners of war and civilian detainees.
06	Time	To construct camps to house enemy prisoners of war and civilian detainees.
07	Time	To develop and enforce internment control measures, such as curfew, travel permits, and lists of controlled supplies and contraband.
08	Time	To forward intelligence information collected to unit intelligence staff.
09	Time	To move enemy prisoners of war and civilian detainees to their respective internment facilities from their initial collection points.
10	Percent	Of interned enemy prisoners of war/civilians who require medical treatment.
11	Percent	Of friendly force personnel in AO involved in maintaining enemy prisoner of war camps and civilian internment facilities.

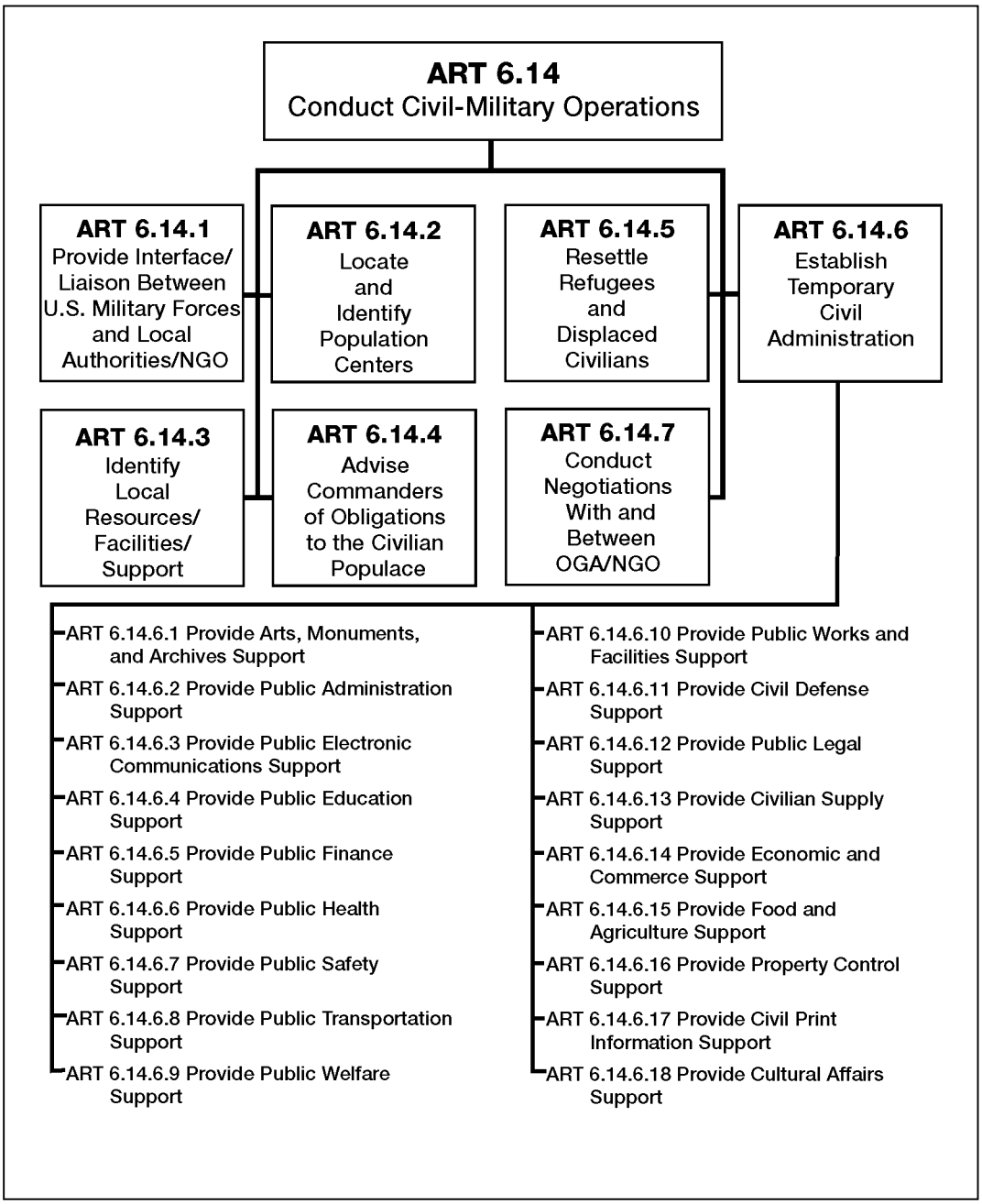
No.	Scale	Measure
12	Percent	Of civilian detainees released after interrogation.
13	Percent	Of unit CSS requirements provided by prisoners of war.
14	Percent	Of unit sustainment capabilities needed to support internment and resettlement program.
15	Number	And types of supplies needed to support internment program.
16	Number	Of enemy prisoners of war and civilian detainees.
17	Number	Of facilities to house civilian detainees established.
18	Number	Of enemy prisoners of war camps established.
19	Ratio	Of guards to enemy prisoners of war.

ART 6.13.2 CONDUCT POPULACE AND RESOURCE CONTROL

6-151. Provide security for a populace, denying personnel and material to the enemy, mobilize population and material resources, and detect and reduce the effectiveness of enemy agents. Populace controls also include the maintenance of curfews, movement restrictions, travel permits, registration cards, and resettlement of villagers. Resource control measures include licensing, regulations or guidelines, checkpoints (for example, roadblocks), reaction controls, amnesty programs, and inspection of facilities. Two subdivisions of populace and resource control operations are dislocated civilian operations and evacuation of host-nation noncombatants. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	The imposition of population and resource control measures accomplishes commander's intent of establishing control measures.
02	Yes/No	Collected contraband accounted for and disposed of IAW international and US law, applicable regulations, and SOFA.
03	Yes/No	Chain of custody for contraband maintained if possession of contraband would result in criminal/administrative trial.
04	Yes/No	Time required to gain approval for adjustments in population and resource control measures does not detract from effectiveness of program.
05	Time	To coordinate with host-nation agencies for implementation of population and resource control measures.
06	Time	To develop plans for imposing populace control by the enforcement of curfews, movement restrictions, travel permits and registration cards, and assisting in the evacuation of noncombatants.
07	Time	To develop plans for resource control, such as establishing roadblocks and checkpoints, inspecting facilities, enforcing local regulations and guidelines, controlling rations, and assisting with amnesty program.
08	Time	To inform local population of new/revised population and resource control measures imposed on them.
09	Time	To determine required population and resource control measures.
10	Time	Restrictions imposed on local civilian population.
11	Percent	Of local population supporting population and resource control measures.

No.	*Scale*	*Measure*
12	Percent	Of contraband detected during the conduct of resource control operations.
13	Percent	Of available effort devoted to population and resource control measures.
14	Percent	Of AO/local population affected by population and resource control measures.
15	Number	And types of units involved in populations and resource control operations.
16	Number	Of instances that violations of population and resource control measures are detected.
17	Number	Of tons and types of contraband detected during resource control operations.
18	Cost	To establish and administer population and resource control operation.



SECTION XIV – ART 6.14: CONDUCT CIVIL-MILITARY OPERATIONS

6-152. Conduct phases of the activities of a tactical commander that embrace the relationship between the military forces located in a country or area and the civil authorities and people of that country or area. ART 6.14 usually occurs during hostilities or in an emergency situation. A treaty or other expressed or implied agreement normally covers the specific activities performed. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The conduct of civil-military operations (CMO) in AO supports mission accomplishment by US forces.
02	Yes/No	US forces act as the disinterested party in negotiations between opposing ethnic, cultural, religious, and social groups in the AO.
03	Time	To refine civil affairs program/produce CMO annex to operations order after receipt of warning order.
04	Time	To establish civil-military operations center.
05	Time	For legal authority to review civil affairs plan.
06	Time	To deploy civil affairs personnel to support civil affairs mission.
07	Time	To achieve agreement with local authorities on local population control measures.
08	Time	To assess situation and define needed assistance.
09	Time	To coordinate and conduct liaison with nongovernmental organizations represented within the AO.
10	Time	To establish liaison with allied and coalition military forces concerning civil affairs matters.
11	Time	To identify and integrate civil affairs support and appropriate civil affairs essential elements of information into command intelligence programs in AO.
12	Time	To submit civil affairs plan to country team for their review and approval.
13	Time	To identify cultural, ethnic, social, and religious characteristics of the local populace.
14	Time	To educate US military forces to reduce acts contrary to local customs and practice.
15	Percent	Of local population able to maintain normal day-to-day activities.
16	Percent	Of local population able to remain in their homes.
17	Percent	Of US military supplies and resources in AO used to conduct civil affairs activities.
18	Number	Of instances of supportive and hostile actions directed toward civilians in AO.
19	Number	And types of restrictions imposed on the use of cultural property.

ART 6.14.1 PROVIDE INTERFACE/LIAISON BETWEEN US MILITARY FORCES AND LOCAL AUTHORITIES/NONGOVERNMENTAL ORGANIZATIONS

6-153. Facilitate CMO by providing interface between US military forces and host nation, foreign authorities or military forces, and non-governmental organizations (NGOs). Provide interface between US military forces and host-national as well as international police forces with US Military Police forces. Minimize the likelihood and/or effects of civil interference with military operations. Locate and identify significant arts, monuments, and archives throughout the AO and prepare directives to safeguard these cultural properties. Help the commander meet his moral and legal obligations. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Liaison conducted within the AO contributes to accomplishment of the mission of US forces.
02	Time	To refine the CMO program for AO after receipt of warning order.
03	Time	To identify key civilian agencies and officials within the AO.
04	Time	To establish liaison with appropriate foreign national civilian government officials in AO after receipt of mission.
05	Time	To establish liaison with US country team and other US governmental agencies and host-nation, nongovernmental, and allied/coalition organizations and forces.
06	Time	To establish information system interconnectivity between organizations within the AO.
07	Percent	Of nongovernmental organizations in AO receiving US military support.
08	Percent	Of interagency requests for assistance met within the AO.
09	Percent	Of civil-military operations relevant information, such as population centers and the location of significant arts, monuments, and archives, that is included in the unit's database.
10	Number	Of different organizations cooperating on the same or different projects within the AO.
11	Number	Of instances of insufficient support provided to and from other nations, groups, and agencies.
12	Number	Of liaison teams provided by a unit.
13	Number	Of liaison teams provided to a unit from other organizations.
14	Number	And types of information systems used to maintain information flow between liaison teams and supported/supporting organizations.
15	Cost	Of establishing and maintaining effective liaison activities within the AO.

ART 6.14.2 LOCATE AND IDENTIFY POPULATION CENTERS

6-154. Locate and identify population centers in the area of interest and anticipate population movements that may occur in response to future combat operations. Cooperate with local authorities to plan the movement of displaced civilians and minimize interference with close combat operations. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The location and identification of population centers within the AO supports mission accomplishment by US forces.
02	Yes/No	Civil affairs unit conducts area assessment IAW command guidance and mission requirements.
03	Time	To establish liaison with appropriate foreign nation civilian government officials in AO after receipt of mission.
04	Time	To establish liaison with US country team and other US governmental agencies and host-nation, nongovernmental, and allied/coalition organizations and forces.
05	Time	To identify population centers that might interfere with combat operations in the AO.

No.	Scale	Measure
06	Time	To plan with local authorities for the orderly movement of displaced local civilians during the conduct of combat operations within the AO.
07	Percent	Of combat operations degraded, delayed, or modified due to displaced civilians within the AO.
08	Percent	Of resources within the AO required to control the movement of displaced civilians.
09	Percent	Of displaced civilian control provided by host nation.
10	Number	Of civilian casualties sustained during the conduct of military operations within the AO.
11	Number	Of displaced civilian centers established in AO.

ART 6.14.3 IDENTIFY LOCAL RESOURCES/FACILITIES/SUPPORT

6-155. Identify, locate, and assist in the acquisition of local resources, civilian labor, facilities, and other support that tactical organizations require to accomplish their missions. Coordinate and administer host-nation agreements and other forms of foreign nation support. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The identification of local resources, facilities, and other support will assist in accomplishing the mission of US forces within the AO.
02	Yes/No	Civil affairs unit conducts area assessment IAW command guidance and mission requirements.
03	Yes/No	The diversion of local resources, facilities, and other support from civil to military units will not affect the local economy and civilian community in an unacceptable manner.
04	Time	To establish liaison with appropriate foreign nation civilian government officials in AO after receipt of mission.
05	Time	To coordinate host-nation support agreements before or after unit arrival within an AO.
06	Time	To identify sources of dietary items necessary to support indigenous and US personnel operating within the AO.
07	Time	To identify sources of non-dietary items necessary to support indigenous and US personnel operating within the AO.
08	Time	To identify sources of transportation assets that can be used to support the mission of US forces.
09	Time	To identify housing facilities that can be used to support the mission of US forces.
10	Time	To identify indigenous human resources—translators, skilled craftsmen, professionals, and laborers—that can be used to support the mission.
11	Percent	Of supplies and services used by US units procured from host-nation sources.
12	Percent	Of CSS and logistic effort within the AO provided by host nation.
13	Percent	Of local economy that will be affected by the acquisition of local resources, facilities, and other support.

No.	Scale	Measure
14	Number	And types of facilities used by US units provided by host nation.
15	Number	And types of host-nation support agreements in effect in AO.
16	Number	Of US units within the AO that have host-nation liaison officers assigned.
17	Cost	Of identifying local resources/facilities/support within the AO.

ART 6.14.4 ADVISE COMMANDERS OF OBLIGATIONS TO CIVILIAN POPULATION

6-156. Develop, in conjunction with the staff judge advocate, requirements and guidance for military personnel concerning the treatment of the civilian population. Provide authoritative guidance to military personnel on the customary and treaty law applicable to the conduct of land warfare as it applies to civilian populations. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Unit staff judge advocate international law specialist advises commander on civil laws, actions, and local customs that violate U.S law, international agreements, or individual human rights.
02	Yes/No	Prior to mission start, the supporting civil affairs staff analyzes, formulates and presents information about the civil affairs aspects of the AO. The format for this briefing package is IAW the supported command's standing operating procedures and is modified throughout the conduct of the operation as conditions change.
03	Yes/No	Unit civil affairs staff advises the commander on essential goods and services—food, shelter, health support—necessary to sustain life for the civilian population of the AO.
04	Yes/No	Commander advised of US military operations that are planned or that have occurred that violate local customs, US law, or international agreements.
05	Time	For the unit civil affairs staff to establish coordination with appropriate agencies within the AO, such as the staff judge advocate, US country team, and host-nation government legal officials.
06	Time	For the unit civil affairs staff to analyze the impact of the mission on the civilian population and predict civilian casualties, property destruction, and infrastructure dislocation, and the impact on the civilian population.
07	Time	For the unit civil affairs staff to consider religious aspects, customs, and cultures in the AO and their effect on operations.
08	Time	For staff judge advocate international law specialist to review host-nation agreements, international law, and applicable treaties, and US policies to identify restrictions and/or requirements for humanitarian assistance and identify legal and moral limits on military operations.
09	Time	For staff judge advocate operational law specialist to conduct a legal review of operations and coordinate jurisdiction requirements.
10	Percent	Difference between planned and actual requirements to support civilians within AO.
11	Number	Of violations of legal obligations and moral considerations by US forces within the AO within a given time.
12	Cost	Of meeting the commander's obligations toward the civilian population.

ART 6.14.5 RESETTLE REFUGEES AND DISPLACED CIVILIANS

6-157. Estimate the number of dislocated civilians, their points of origin, and anticipated direction of movement. Plan movement control measures, emergency care, and evacuation of dislocated civilians so that they do not interfere with US military operations. Coordinate with military forces for transportation, military police support, military intelligence screening/interrogation, and medical activities, as needed. Advise on or establish and supervise the operation of temporary or semi-permanent camps for dislocated civilians. Resettle or return dislocated civilians to their home IAW US policy and objectives. Advise and assist host country and US agencies on camps and relief measures for dislocated civilians. Supervise the conduct of movement plans for dislocated civilians. (FM 41-10) (USAJFKSWCS)

No.	*Scale*	*Measure*
01	Yes/No	The refugee/displaced civilian program within the AO supports accomplishment of the mission of US forces.
02	Yes/No	The unit establishes liaison, coordinates activities, and develops plans IAW international law, treaties, and agreements.
03	Yes/No	The unit operations staff, with help from special functions teams, establishes care and control policies for refugees and displaced civilians that minimize civilian interference with military operations and provides the assistance IAW international law.
04	Time	To review current situation and identify refugee/displaced civilian requirements.
05	Time	To establish liaison with national authorities, relief agencies, and voluntary agencies involved with refugees and displaced civilians.
06	Time	To determine impact of refugee/displaced civilians on military operations.
07	Time	To develop, coordinate, and implement control measures for refugees/displaced civilians to include movement control policy, collection points and assembly areas for refugees/displaced civilians.
08	Time	To develop policy for providing minimum essential support requirements to refugees/displaced civilians.
09	Time	To prepare plans for the establishment of refugee/displaced civilian assembly points and camps. This includes determining transportation requirements, availability of local and military resources that can be used to support refugee/displaced civilians, developing camp in-processing, administration, and security procedures.
10	Time	To establish policy for final disposition of refugees/displaced civilians to include guidelines for their release to return to their homes, transition of US control over their camps to host-nation, coalition, allied, and nongovernmental organizations.
11	Time	To review refugee and displaced civilian plans for compliance with international laws, treaties, and agreements.
12	Percent	Difference between planned refugee/displaced civilian support requirements and actual requirements.

No.	Scale	Measure
13	Percent	Of planned refugee/displaced civilian support capabilities currently available within the AO.
14	Percent	Of US forces within the AO involved in the conduct of refugee/displaced civilian operations.
15	Number	Of refugees/displaced civilians within the AO.
16	Number	And types of forces involved in the conduct of refugee/displaced civilian operations within the AO.
17	Number	And capacity of refugee/displaced civilian camps and centers established within the AO.
18	Cost	Of refugee and displaced civilian operations within the AO.

ART 6.14.6 ESTABLISH TEMPORARY CIVIL ADMINISTRATION (FRIENDLY, ALLIED, AND OCCUPIED ENEMY TERRITORY)

6-158. Establish a temporary civil administration (at the direction of the National Command Authorities) until existing political, economic, and social conditions stabilize in enemy territory, or in friendly territory where there is a weak or ineffective civil government. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Actions of temporary civil administration support accomplishment of the mission of US forces within the AO.
02	Time	To receive direction or approval from appropriate authority to conduct executive, legislative, or judiciary functions within a foreign country within the AO.
03	Time	To coordinate transition between US forces and local government/U.N. administration within the AO.
04	Time	To determine US post-conflict policy objectives within the AO.
05	Time	To account for funds and equipment expended during military administration in AO.
06	Time	To close outstanding claims against military administration in AO.
07	Time	To establish liaison with necessary host-nation executive, legislative, judiciary, and civil agencies within the AO.
08	Time	To conduct legal review of plans and policies for civil administration.
09	Time	To identify threats to civil administration within the AO and develop security plans. This includes the review of intelligence holdings, area studies, and assessments.
10	Time	To implement force protection measures.
11	Time	To determine minimum standards of care—public works, health, communications, safety, and transportation—for the civilian population IAW international law and treaties.
12	Time	To develop and issue proclamations, ordinances, orders, and instructions intended to be binding on the local populations of the AO.

No.	Scale	Measure
13	Time	To determine the degree of influence, supervision, and control to be used by those elements responsible for conducting civil administration.
14	Time	To conduct public administration training of US forces committed to the civil administration mission.
15	Percent	Of US forces in an AO required to conduct temporary civil administration.
16	Percent	Of US support requirements within an AO that can be provided from civilian sources.
17	Percent	Of required civilian and military labor requirements that can be supplied by indigenous sources.
18	Percent	Of required civilian supplies and services that must be provided from military assets.
19	Number	Of civil affairs assets required to remain in AO to conduct civil administration.
20	Number	And types of US forces, other than civil affairs, required to remain in AO to support a military civil administration.
21	Cost	To establish temporary civil administration over friendly, allied, and occupied enemy territory.

ART 6.14.6.1 PROVIDE ARTS, MONUMENTS, AND ARCHIVES SUPPORT

6-159. Prepare a list and map overlay showing the location of significant cultural properties requiring special protection. Include the name and significance of the persons or organizations having custody. Provide information for use in public affairs command information programs to inform all military personnel of directed actions concerning arts, monuments, and archives. Prepare plans and directives for the protection of arts, monuments, archives, and other cultural properties. Coordinate military support for the NBC decontamination of cultural properties. Advise, assist, or direct the restoration of cultural properties that have been damaged. Help in locating, identifying, determining ownership, and safeguarding arts, monuments, and archives. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The arts, monuments, and archives program supports US force mission accomplishment.
02	Yes/No	The unit establishes liaison, coordinates activities, and develops plans for arts, monuments, and archives support IAW international law, treaties, and agreements.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To review or formulate arts, monuments, and archives policies and ensure these policies comply with US goals and objectives.
05	Time	To conduct census of art, monument, and archive objects located within the AO and determine their condition. This includes marking these objectives to ensure their identification in case of theft.

No.	Scale	Measure
06	Time	To identify the facilities and security procedures available for the protection of arts, monuments, and archives within the AO. This may involve the designation of collection points for art, monument, and archive objects.
07	Time	To establish liaison with local arts, monuments, and archives agencies.
08	Time	To advise local custodian in restoring, inventorying, and safeguarding arts.
09	Time	To review art, monument, and archive plans for compliance with international laws, treaties, and agreements.
10	Percent	Of art, monument, and archive objects within the AO that are destroyed/damaged by military operations, lost to theft, or destroyed/damaged by natural disaster.
11	Number	And types of US forces involved in the protection of art, monument, and archive objects within the AO.
12	Number	And types of art, monument, and archive objects within the AO that are destroyed/damaged by military operations, lost to theft, or destroyed/damaged by natural disaster.
13	Cost	To provide arts, monuments, and archives support within the AO.

ART 6.14.6.2 PROVIDE PUBLIC ADMINISTRATION SUPPORT

6-160. Provide liaison to the military forces. Survey and analyze the operation of local governmental agencies: their structure, centers of influence, and effectiveness. Advise, assist, supervise, or direct governmental agencies. Recommend and, within the limits of authority, implement governmental functions, policies, and procedures for the conduct of government. Identify officials whose continued service would be adverse to US interests and remove them from office. Recommend for appointment to key offices, individuals who are respected civilians of the area and who would best serve the interests of the United States. Individuals must be cleared by military intelligence prior to nomination. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public administration within the AO supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current public administration system, and develops plans that will improve the existing public administration system of the foreign nation IAW international law, treaties, and agreements.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To establish liaison with civilian public administration agency officials within the AO.
05	Time	To evaluate the operations of civilian public administration agency within the AO. This includes the determination of the availability and scope of public administration resources, a review of public administration policies and regulations, and determination of their effectiveness.
06	Time	To plan the use of public administration agencies resources to support US operations.

No.	Scale	Measure
07	Time	To develop plans for providing public administration assistance. This includes analyzing the areas and degree of need for public administration assistance and looking at existing public administration agencies to determine if they require restructuring.
08	Time	To develop plans to restore civilian authority during and after military operations. This includes identifying institutions requiring restoration of their authority, evaluating local personnel to determine their loyalty and values and identifying individuals to be placed in authority positions, and removing individuals presumed subversive to US objectives in the AO.
09	Time	To conduct legal review of planned changes to public administration system and regulations.
10	Percent	Of local control of public administration within the AO.
11	Percent	Of US forces in AO providing support to public administration.
12	Percent	Of local population satisfied with public administration services provided them within the AO.
13	Percent	Of local population complying with public administration registration, licensing, regulation, and fee/taxation requirements imposed on them.
14	Percent	Of public service administrators within the AO who have been cleared by US forces to perform their functions.
15	Number	Of public administration offices/facilities operating within the AO.
16	Number	Of civilian inhabitants of the AO affected by public administration support.
17	Number	And types of units provided public administration support within the AO.
18	Number	Of individuals removed/prevented from assuming public office because their presumed beliefs are subversive to US objectives within the AO.
19	Cost	To provide public administration support within the AO.

ART 6.14.6.3 PROVIDE PUBLIC ELECTRONIC COMMUNICATIONS SUPPORT

6-161. Manage communication resources, public and private: to include, postal services, telephone, telegraph, radio, television, and public warning systems. Coordinate the use of government and private communication resources for the military. Provide technical advice and assistance on communication systems. Recommend the allocation of civilian communication resources for civilian and military use. Direct civil communication agencies and provide advice, assistance, and supervision as required. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public electronic communication system within the AO supports the mission of US forces.
02	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
03	Yes/No	The unit establishes liaison, evaluates the current public communication system, and develops plans that will improve the existing public communications system of the foreign nation IAW international law, treaties, and agreements.
04	Time	To establish liaison with local public electronic communications agencies.

No.	Scale	Measure
05	Time	To identify available civilian mass communications resources and determine their conditions and capabilities.
06	Time	To plan the use and supervision of government and public communications systems within the AO.
07	Time	To conduct legal review of proposed changes to public electronic communications system and regulations.
08	Time	From making changes to existing laws and ordinances to when the population is informed of the changes.
09	Time	To conduct civilian censorship program.
10	Time	To screen broadcast personalities and mass communications support personnel for political beliefs.
11	Percent	Of civilian mass communications resources in AO under US control.
12	Percent	Of civilian population with access to electronic communications systems by type (am/fm radio, broadcast television, cable television, satellite broadcasts, short-wave, and Internet).
13	Percent	Of civilian population whose only source of electronic communications information is under US control.
14	Number	And types of mass communications systems operable within the AO.
15	Number	Of broadcast personalities and mass communications support personnel removed from their positions because of possible disagreements with US policy within the AO.
16	Cost	To provide public electronic communications support within the AO.

ART 6.14.6.4 PROVIDE PUBLIC EDUCATION SUPPORT

6-162. Provide technical advice and help in planning and implementing needed education programs. Supervise schools and screen personnel and materials in the education system for compatibility with US objectives and interests. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public education system within the AO supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current public education system, and develops plans that will improve the existing public education system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Yes/No	Products of public education system are productive citizens.
05	Time	To establish liaison with local education officials.
06	Time	To evaluate the local education system within the AO. This includes determining the availability, size, and quantity of education resources, the effectiveness of the education system, and extent of damage to educational facilities resulting from military operations or natural disaster.

No.	Scale	Measure
07	Time	To develop plans to provide education assistance. This includes determining the need for public education assistance, reviewing school curriculums and aligning them with desired outcomes, testing cycle, restoring/reopening existing schools, determining security requirements for educational facilities, determining legal considerations regarding education, and plans to administer schools.
08	Time	To conduct staff development of administrators, certified, and classified personnel.
09	Time	To acquire required educational supplies, such as textbooks, paper, pencils, laboratory equipment, and technology, such as computers, educational programs, test item databanks.
10	Time	To acquire vocational educational supplies, such as power tools, woodworking supplies, welding supplies, and automotive diagnostic equipment.
11	Percent	Alignment between desired/tested outcomes and curriculums.
12	Percent	Of population that can access the public education facilities on a regular basis.
13	Percent	Of student population performing at or above established educational goals.
14	Percent	Of student population with special educational or occupational needs.
15	Percent	Of educational facilities within the AO that meet the educational needs of the students.
16	Percent	Of required educational supplies and technology in the hands of students.
17	Percent	Of students attending class on a given day.
18	Percent	Graduation rate.
19	Percent	Of students obtaining post secondary education.
20	Number	Of students, staff, faculty, and administrators within the AO.
21	Number	Of educational facilities within the AO.
22	Number	Of educational facilities closed because of military operations or natural disaster.
23	Number	Of administrative, certified, and classified personnel within the public education system removed because of presumed/proven subversive beliefs.
24	Number	Of administrative, certified, and classified personnel within the public education system removed because of incompetence.
25	Number	Of acts of violence against students, administrative, certified, and classified staff within a given time.
26	Ratio	Of instructors to students.
27	Cost	To provide public education support within the AO.

ART 6.14.6.5 PROVIDE PUBLIC FINANCE SUPPORT

6-163. Provide technical advice and assistance regarding budgetary systems, monetary and fiscal policies, revenue-producing systems, and treasury operations. Control assets of the treasury and financial institutions and prescribe monetary and fiscal policies and other regulatory measures. Assist

local officials in preventing the unauthorized acquisition of public funds. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public finance system within the AO supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current public finance system, and develops plans that will improve the existing public finance system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To evaluate the public financial system within the AO. This includes reviewing the public budgets and revenue sources such as taxes, determining the amount of existing financial resources, types and status of financial institutions, their availability to individuals within the AO. It includes determining if public finance resources can support the conduct of US operations. It includes determining under which laws, customs, and operational procedures the financial system operates.
05	Time	To prepare plans to provide financial assistance. This requires a determination of the capability of civilian financial agencies to function effectively, preparing necessary restrictions and enforcement provisions regarding the exportation of US currency, establishing/revising public fund controls over budget, taxation, expenditures, and accounting procedures.
06	Time	To establish liaison with public finance officials within the AO.
07	Time	To conduct legal review of proposed public finance plans.
08	Percent	Of public funds over which the United States exercises controls.
09	Percent	Of civilian economy within the AO represented by public funds.
10	Percent	Taxation rates within the AO.
11	Percent	Of economy conducted on the black market.
12	Number	And types of public institutions within the AO over which the United States must impost public fund controls.
13	Number	Of local laws and regulations that must be changed to establish adequate public fund controls over budget, taxation, expenditures, and accounting procedures.
14	Number	Of audits conducted of public fund accounts within a given time.
15	Number	Of individuals indicted for stealing public funds.
16	Number	In dollars/local currency of public funds controlled by military agencies within the AO.
17	Number	Of violations of public fund controls found by audits that result in the loss of public funds.
18	Number	Of US individuals necessary to provide public finance support within the AO.
19	Cost	To subsidize public governmental activities within the AO.
20	Cost	To provide public finance support within the AO.

ART 6.14.6.6 PROVIDE PUBLIC HEALTH SUPPORT

6-164. Estimate needs for additional medical support required by the civilian sector. Coordinate acquisition of medical support from voluntary

agencies or US military sources. Coordinate the use of civilian medical facilities and supplies by US military forces. Aid in the prevention, control, and treatment of endemic and epidemic diseases of the civilian populace. Survey and provide assistance with civilian health care (medical personnel, facilities, training programs), and provide guidance for provision of emergency services by US personnel. Analyze, survey, supervise, and/or direct civilian public health and sanitation services, personnel, organizations, and facilities. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public health system within the AO supports the mission of US forces.
02	Yes/No	Civilian medical conditions pose a threat to US forces within the AO.
03	Yes/No	The unit establishes liaison, evaluates the current public health system, and develops plans that will improve the existing public health system of the foreign nation.
04	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
05	Time	To establish liaison with public health agencies within the AO.
06	Time	To evaluate the public health system. This includes determining public health resources available—personnel, facilities, and supplies—their condition and their capability to meet the medical requirements of military forces and civilians within the AO. It also includes the availability of these resources to the civilian population and evaluating the effectiveness of existing public health programs.
07	Time	To prepare plans to prevent and control communicable diseases. Plans require educating indigenous personnel on personal hygiene and sexually transmitted diseases, ensuring local ordinances informing civilians of medical and sanitary measures are made public and enforced, coordinating with public works to ensure that human and other hazardous wastes are safely disposed, protecting food consumed in their raw states, reducing breeding places for disease-carrying insects and animal vectors, preventing hazards to animal and marine life, and containing diseases endemic to the AO.
08	Time	To provide public health assistance. This requires analyzing the organization and functions of existing public health and sanitation agencies, controlling, treating, and preventing communicable diseases, protecting food and water supplies, and supervising the maintenance of public health facilities and records.
09	Time	To establish preventive medicine inoculation plan on activation of the AO.
10	Percent	Difference between planned public health requirements and actual requirements in AO.
11	Percent	Of planned public health preventive medicine support achieved in AO.
12	Percent	Of civilians inoculated for disease prevention in AO.
13	Percent	Of civilian population in AO provided health education and training.
14	Percent	Of civilian population with access to doctors, dentists, and ophthalmologists.
15	Percent	Of doctors, dentists, and ophthalmologists to civilian population within the AO.

No.	Scale	Measure
16	Percent	Of individuals providing public health services within AO currently licensed or certified to perform those services.
17	Number	Of civilians living within the AO that must be provided public health support.
18	Number	And types of public health facilities available within the AO to include their bed capacity.
19	Number	Of currently licensed/certified doctors, physician assistants, nurses, midwives, paramedics, emergency medical technicians, etc. providing public health services within the AO.
20	Number	And types of communicable and sexually transmitted disease cases in AO.
21	Number	Of sanitary inspections conducted within the AO within a given time.
22	Number	Of instances of civilian restaurants and food service facilities shut down for sanitation violations.
23	Cost	To provide public health support within the AO.

ART 6.14.6.7 PROVIDE PUBLIC SAFETY SUPPORT

6-165. Coordinate public safety activities for the military force. Provide liaison between the military forces and public safety agencies and coordinate the control of civilian movement. Advise, assist, or supervise local police, fire fighting, rescue agencies, and penal institutions. Supervise the enforcement of all laws and ordinances after the populace has been duly informed. Take into custody all arms, ammunition, implements of war, and contraband items. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
02	Yes/No	Public safety system within the AO supports the mission of US forces.
03	Yes/No	The unit establishes liaison, evaluates the current public safety system, and develops plans that will improve the existing public safety system of the foreign nation.
04	Time	To establish liaison with public safety agencies operating within the AO.
05	Time	To evaluate public safety system within the AO. This includes determining availability, capabilities, effectiveness, and resources of existing public safety agencies, such as police, fire fighting, prison, and emergency rescue agencies.
06	Time	To develop plans to provide public safety assistance. This requires the review of existing civilian public safety plans, informing the civilian population of new/revised laws and ordinances, and integrating and supervising the enforcement of laws and ordinances to include civilian movement control restrictions.
07	Time	To review public safety plans for compliance with international laws, treaties, and agreements.
08	Percent	Difference between planned public safety requirements and actual requirements in AO.
09	Percent	Of planned public safety support achieved in AO.

No.	Scale	Measure
10	Percent	Of civilian population in AO provided protection by public safety agencies and organizations.
11	Percent	Of public safety personnel who have passed screening tests for human rights abuses, criminal activities, and political views.
12	Percent	Of public safety personnel licensed/trained to perform their jobs.
13	Percent	Of public safety effort within the AO provided by US forces.
14	Number	And types of public safety facilities located within the AO.
15	Number	And types of US forces used to provide public safety within AO.
16	Number	And types of criminal activities occurring within the AO within a given time.
17	Number	And types of fires and hazardous material incidents within the AO within a given time.
18	Number	And types of civilian public safety personnel within the AO.
19	Number	Of civilian personnel detained in prisons and jails within the AO for civil offenses.
20	Cost	To support public safety within the AO.

ART 6.14.6.8 PROVIDE PUBLIC TRANSPORTATION SUPPORT

6-166. Identify the modes and capabilities of transportation systems available in the civilian sector. Coordinate the use of locally available assets—to include, railroads, highways, ports, airfields, and motor vehicles—to support military operations. Prepare plans for the use of available civilian and military transportation assets for emergency civilian evacuation from combat areas or transportation of relief supplies. Provide advice and assistance in establishing and operating transportation facilities. Direct civilian transport agencies and functions. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public transportation system within the AO supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current public transportation system, and develops plans that will improve the existing public transportation system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To establish liaison with transportation agencies.
05	Time	To evaluate existing public transportation system capabilities within the AO. This includes the number and operating conditions of mass transportation assets, bulk carriers, and specialty transportation assets.
06	Time	To identify civilian and military transportation needs and capabilities within the AO.
07	Time	To review public transportation plans for compliance with international laws, treaties, and agreements.
08	Percent	Difference between planned and actual public transportation requirements within the AO.

No.	Scale	Measure
09	Percent	Of civilian population that has access to public transportation in the AO.
10	Percent	Of AO covered by public transportation systems.
11	Percent	Of US forces within the AO involved in the provision of public transportation support.
12	Percent	Of US military transportation requirements that can be met by public transportation assets within the AO.
13	Number	And types of US forces needed to provide public transportation support.
14	Number	And types of mass transportation assets available within the AO.
15	Number	Of metric tons/day that can be moved by public transportation assets.
16	Number	Of passengers per day that can be moved by public transportation assets.
17	Cost	To provide public transportation support within the AO.

ART 6.14.6.9 PROVIDE PUBLIC WELFARE SUPPORT

6-167. Determine the type and amount of welfare supplies needed for emergency relief. Plan and coordinate for the use of welfare supplies from all sources. Advise and assist the host government. Establish and supervise emergency centers for distributing supplies and for housing and feeding civilians. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public welfare system within the AO supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current public welfare system, and develops plans that will improve the existing public welfare system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To establish liaison with public welfare agencies within the AO.
05	Time	To evaluate the public welfare system. This requires determining the extent of the welfare problem, number and location of civilian welfare organizations available, the resources that they have available, and their effectiveness in providing services to those who need them.
06	Time	To plan public welfare assistance. This includes the review of existing public welfare laws and programs, determining the numbers of needy civilians to be serviced and the types of assistance they need—food and clothing—and their availability within the AO. It includes planning for the supervision of emergency shelters and feeding centers to include the recruitment and screening of public welfare personnel, the protection and evacuation of welfare storage and operating facilities, and the distribution of welfare supplies.
07	Time	To procure and transport public welfare supplies to storage/distribution centers.
08	Time	To conduct public welfare assistance.
09	Time	To educate civilian population within the AO on public welfare support available to them.

No.	Scale	Measure
10	Percent	Difference between planned public welfare requirements and actual requirements in AO.
11	Percent	Of planned public welfare support achieved in AO.
12	Percent	Of US forces in AO involved in the conduct of public welfare.
13	Percent	Of public welfare support within the AO provided by civilian organizations.
14	Percent	Of civilian population in AO that has access to public welfare facilities.
15	Number	And types of US forces providing public welfare support.
16	Number	Of civilian deaths resulting from an inability to access public welfare within a given time.
17	Number	Of civilians within the AO provided public welfare.
18	Number	And types of other governmental agencies and nongovernmental agencies providing public welfare within the AO.
19	Cost	To provide public welfare support within the AO.

ART 6.14.6.10 PROVIDE PUBLIC WORKS AND FACILITIES SUPPORT

6-168. Coordinate public works and utilities support for military operations. Advise and assist in the construction, operation, and maintenance of public works and utilities. Direct public works and utilities operations. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public works and facilities within the AO support the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current public works and facilities system, and develops plans that will improve the existing public works and facilities system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Yes/No	Public works systems constructed to plan specifications within allotted time.
05	Yes/No	Public works systems safeguard the health of noncombatants within the AO.
06	Time	To establish liaison with public works and facilities agencies within the AO.
07	Time	To review public works and facilities within the AO. This includes determining the functions and authority of existing public works and facilities regulatory agencies.
08	Time	To develop public works program within AO. This includes determining the type of support needed, the concerned civil agencies, the dependability of local agencies and area residents, and developing security plans to protect public works facilities.
09	Time	To perform reconnaissance of selected sites for new public works facilities to evaluate the sites for suitability and conditions, identify construction problems and possible courses of action, and update/revise the engineer estimate.

No.	Scale	Measure
10	Time	To prepare construction directives for public work facilities and issue it to the construction unit/company.
11	Time	To coordinate for and receive additional assets to perform public works functions.
12	Time	To monitor construction and conduct quality assurance inspections.
13	Time	To verify accuracy of public work construction plans and specifications to include ensuring that the bill of materials includes all required materials to complete construction.
14	Time	To design new construction requirements.
15	Time	To manage and administer public works program within AO.
16	Time	To conduct environmental baseline surveys on real estate being considered for acquisition or use by public works facilities.
17	Time	To inventory equipment located within and supporting public work facilities.
18	Time	To maintain public works records.
19	Percent	Difference between planned and actual requirements for public works within the AO.
20	Percent	Of planned public works facilities acquired or constructed in AO.
21	Percent	Of existing public works facilities modernized within the AO.
22	Percent	Of existing public works facilities that can be used in their current condition.
23	Percent	Of existing public works facilities damaged by combat actions or natural disaster.
24	Percent	Of civilian nonbattle injuries and disease within AO attributable to inadequate public works support.
25	Percent	Of US effort within the AO used to provide public works support.
26	Number	Of metric tons/liters and types of waste, refuse, and hazardous material produced per day within the AO.
27	Number	And types of public works facilities constructed/acquired.
28	Number	And types of US forces used to provide public works support within the AO.
29	Cost	Of providing public works support within the AO.

ART 6.14.6.11 PROVIDE CIVIL DEFENSE SUPPORT

6-169. Ensure an adequate civil defense structure exists. Advise, assist, or supervise local civil defense officials. Assess civil defense planning for emergency welfare services and emergency food, water, sanitation, and medical supplies. Coordinate civil defense activities of fire, police, and rescue personnel with those of the military. Integrate local civil defense agencies into the military NBC warning system. Coordinate EOD activities in the civil sector. Issue instruction on defense measures for NBC and other attacks and monitor the control of mass civilian casualties resulting from NBC warfare. Identify civilian NBC and other protective shelters and assess their suitability. Identify civilian evacuation routes and assess their adequacy. Ensure that NBC protective measures are included in civil defense plans and

that available NBC protective equipment is acquired. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The civil defense program within the AO protects the civilian inhabitants from the hazards associated with military operations and natural disasters and supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current civil defense system, and develops plans improving the existing civil defense system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To plan and establish an effective civil defense program within the AO. This includes the evaluation of existing civil defense programs, such as the emergency warning system, emergency communications systems, radiological monitoring systems, air raid and fallout shelters, emergency operations centers, and area damage control plans to determine efficiency and effectiveness.
05	Time	To evaluate the local civil defense system to determine its efficiency, the resources available to it, and the availability of additional resources that may provide civil defense.
06	Time	To establish liaison with local civil defense agencies.
07	Time	From the detection of a hazard to when the population is warned to take shelter.
08	Percent	Of population protected by an effective civil defense program..
09	Percent	Of population serviced by an effective civil defense warning system.
10	Percent	Of AO served by an effective civil defense warning system.
11	Percent	Of AO protected by an effective civil defense program.
12	Percent	Of identified high-value civilian assets/facilities protected by an effective civil defense program.
13	Percent	Of US forces within the AO providing civil defense support.
14	Number	Of air raid and fallout shelters within the AO.
15	Number	And types of fire fighting, emergency medical response, HAZMAT, and public safety/law enforcement teams operating within the AO.
16	Number	Of weather and aircraft observers operating within the AO.
17	Number	And types of US forces providing civil defense support within the AO.
18	Cost	To provide civil defense support within the AO.

ART 6.14.6.12 PROVIDE PUBLIC LEGAL SUPPORT

6-170. Establish supervision over local judiciary system, establish civil administration courts, and help in preparing or enacting necessary laws for the enforcement of US policy and international law. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The civilian public legal system operating within the AO provides for the rule of law and justice to the civilian population and supports the mission of the US force.
02	Yes/No	The unit establishes liaison, evaluates the current judicial system, and develops plans that will improve the existing judicial system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To establish liaison with local judicial officials.
05	Time	To evaluate the judicial system within the AO. This includes determining effectiveness of the civilian court system, judiciary reliability, quantity and quality of legal resources available to the civilian population, finding out which areas need legal assistance, range of criminal and civil legislation and statutes, methods used to record, report, and publish laws and decisions, and deficiencies on government operations.
06	Time	To determine to reopen local civilian tribunals.
07	Time	To develop plans for providing legal support, such as establishing tribunals and other judicial and administrative agencies and determining the number, types, jurisdiction, procedures, and delegation of appointing authority of the tribunals and other judicial and administrative agencies.
08	Time	To establish a prison and institution administration review system.
09	Time	To develop an advisory program to upgrade the judiciary and other legal agencies.
10	Time	On average that individuals wait to settle civil and criminal charges.
11	Percent	Of available legal support within the AO devoted to supporting public legal support.
12	Percent	Of legal actions occurring within the AO conducted solely by local civilians.
13	Number	Of judge advocate general personnel supporting the conduct of public legal support.
14	Number	Of other US Army personnel supporting the conduct of public legal support.
15	Number	Of local civilian lawyers, judges, and legal assistants cleared to conduct public legal support.
16	Number	Of criminal and administrative legal cases within the AO.
17	Cost	To provide public legal support within the AO.

ART 6.14.6.13 PROVIDE CIVILIAN SUPPLY SUPPORT

6-171. Determine the availability of local supplies for civil and military use. Coordinate military needs for local resources and coordinate their acquisition. Determine the needs of the populace for emergency supplies and arrange for distribution IAW policy. Coordinate the movement of essential civilian supplies. Plan and supervise rationing programs. Arrange salvage of captured supplies that can be used by the civilian populace. Advise and assist allied governments in these activities, when appropriate. Direct governmental and commercial supply activities. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	Public supply system within the AO supports the mission of US forces.
02	Yes/No	The unit establishes liaison, evaluates the current civilian supply system, and develops plans that will improve the existing civilian supply system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Yes/No	Civilian supply plan reviewed by authority for compliance with international laws, treaties, and agreements.
05	Time	To review civilian supply plan for compliance with international laws, treaties, and agreements.
06	Time	To plan, coordinate, and move supplies from current locations to distribution points.
07	Time	To identify the resources to support civilian and military operations. Includes the establishment of procedures to survey civilian supply and associated accounting procedures. It also includes the determination of the adequacy of civilian supplies, agricultural and industrial patterns, and the effect redistributing resources would have on the populace.
08	Time	To develop plan to prevent black market activities. Includes establishing procedures to determine critical commodities in short supply or in danger of being in short supply; establishing a system to inventory available resources, requiring holders of excess resources to declare those stocks and surrender them against a receipt; determining if rationing or price control programs exist or need to exist; developing methods of distribution; issuing guidance on preparing and posting ordinances, laws, and proclamations for distribution to the local population; establishing program to educate inhabitants on violations and resulting punishment; and establishing security measures to protect storage facilities and distribution points.
09	Percent	Of required civilian supplies provided internal to the AO.
10	Percent	Of required civilian supplies provided by salvaging captured enemy supplies.
11	Percent	Of required civilian supplies that must be provided by US forces or other agencies.
12	Percent	Of US military supplies that can be provided from sources within the AO.
13	Percent	Of available US military resources to conduct civilian supply support within the AO.
14	Percent	Of black market activity detected and suppressed by law enforcement operations.
15	Number	Of tons per day and types of emergency supplies provided to the populace.
16	Number	Of individuals per day provided emergency supplies.
17	Number	Of tons and types of enemy supplies salvaged for use by the civilian population of the AO within a given time.
18	Number	Of metric tons per day of each type of critical commodity diverted to the black market.
19	Number	Of cases per day of individuals arrested for black market activities.

No.	Scale	Measure
20	Cost	Of civilian supply support.

ART 6.14.6.14 PROVIDE ECONOMIC AND COMMERCE SUPPORT

6-172. Determine the availability of local resources for military and civilian use. Determine the economic controls and the governmental structure related to economics and commerce. Help in developing and executing price control and rationing programs. Direct support to keep key industries operating. Advise, assist, or direct governmental economic and commercial agencies. Develop and implement plans to prevent black-market activities. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The public economic and commercial system supports the mission of US forces within the AO.
02	Yes/No	The unit establishes liaison, evaluates the current economic and commerce system, and develops plans that will improve the existing economic and commerce system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To assess the operation of economic and commercial agencies within the AO. Includes developing a census of key economic and commercial industries, establishing communications links between civilian governmental agencies, university, and industry personnel, preparing survey to determine means of production, distribution channels, marketing methods, locations of raw materials, assistance programs available, food and fiber production and requirements, food and agricultural processing and storage facilities, and types and volumes of commodities entering trade.
05	Time	To determine the feasibility of establishing new industries.
06	Time	To evaluate the effectiveness of monetary and fiscal systems and policies and make recommendations. This includes reviewing revenue producing systems, budgetary systems, treasury operations, central banking operations, and commercial banking operations.
07	Time	To prepare and coordinate plans to assist the country's economic and commercial agencies.
08	Time	To assess the availability of civilian resources for civilian and military use.
09	Time	To review economic and commerce support plans for compliance with international laws, treaties, and agreements.
10	Time	To develop plans to prevent or limit black market activities to include rationing and price control programs, controlling methods of distribution of critical commodities, and providing security measures to protect storage facilities and distribution points.
11	Percent	Of economy operating on a cash or credit basis versus barter.
12	Percent	Of stocks of critical supplies diverted to black market.
13	Percent	Of economy dependent on foreign investment and aid.
14	Percent	Inflation rate within the AO.
15	Percent	Individual civilian savings rate within the AO.

No.	Scale	Measure
16	Percent	Unemployment or underemployment within the AO.
17	Number	And types of commercial facilities restored to operating condition/improved within the AO.
18	Number	And types of new industries/services located within the AO.
19	Number	And types of critical commodities available primarily through the black market.
20	Number	Of metric tons/per day of each type of critical commodity diverted to the black market.
21	Number	Of cases per day of individuals arrested for black market activities.
22	Cost	Of direct support/subsidies to keep key industries operating.

ART 6.14.6.15 PROVIDE FOOD AND AGRICULTURE SUPPORT

6-173. Provide advice and assistance in establishing and managing crop improvement programs, agricultural training, use of fertilizers and irrigation, livestock improvement, and food processing, storage, and marketing. Direct the governmental food and agricultural agencies. Identify areas of staple crops and areas of surplus and deficit foodstuffs, and devise a means to distribute the surplus and eliminate the deficit. Identify locations and capacities of livestock, food processing, storage, and marketing areas. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The food and agricultural support system within the AO supports the mission of US forces within the AO.
02	Yes/No	AO becomes self-sufficient in food and agricultural products or because of productivity of its economy and commerce can afford to import the shortfall in its required food and agricultural products.
03	Yes/No	The unit establishes liaison, evaluates the current food and agriculture system, and develops plans that will improve the existing food and agriculture system of the foreign nation.
04	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
05	Time	To identify food processing and distribution requirements. This includes surveys to determine food production capability, determine limiting factors affecting the production, processing, and storage of food supplies, determine the transportation needs to complete the mission, and the development of regulatory measures or incentives that encourage the production, safeguard, and orderly distribution of agricultural products.

No.	Scale	Measure
06	Time	To develop plans for government food and agricultural programs. This requires determining the key personnel involved in agriculture and food production within the AO; providing interface with technical specialists working in food and agriculture; and conducting surveys of food and fiber requirements, processing and storage facilities and capabilities, marketing systems, credit availability, agricultural education, and land tenure. It also requires determining the location of food supplies, existing and projected shortages in food and agricultural products, and preparing studies on the civilian population's dietary habits and nutritional requirements.
07	Time	To develop plan to prevent black market activities. Includes establishing procedures to determine critical commodities in short supply or in danger of being in short supply; establishing a system to inventory available resources, requiring holders of excess resources to declare those stocks and surrender them against a receipt; determining if rationing or price control programs exist or need to exist; developing methods of distribution; issuing guidance on preparing and posting ordinances, laws, and proclamations for distribution to the local population; establishing program to educate inhabitants on violations and resulting punishment, and establishing security measure to protect food storage facilities and distribution points.
08	Time	To assess the availability of food and agricultural resources from the AO for use by US military forces.
09	Time	To survey and supervise civilian farming methods within the AO. This includes the establishment of a farm credit system and technical and engineering advice programs. It also includes coordinating the procurement of farm labor during critical planting and harvesting seasons and estimating requirements for food, fertilizer, farm machinery, and other resources.
10	Time	To develop plans for the use and conservation of land, food, and marine resources to include setting procedures for seizing and maintaining all agricultural, fishing, and forestry records, and recommending plans for restoring, using, and conserving land, forests, and marine resources.
11	Time	To review food and agriculture support plans for compliance with international laws, treaties, and agreements.
12	Percent	That the AO is self-sufficient in food and agricultural products.
13	Percent	Of US force requirements for food and agricultural products that can be provided by the AO from its surplus stocks.
14	Percent	Of US force committed to food and agricultural support.
15	Percent	Of population in AO involved in food and agricultural production.
16	Percent	Of individuals within the AO involved in food production who own their farms.
17	Number	And types of agricultural exhibition projects conducted within the AO to introduce new farming equipment, techniques of farming, agricultural crops, and livestock.
18	Number	Of civilians within the AO involved in educational programs designed to improve their capability to farm and manage farm-related businesses.

No.	Scale	Measure
19	Number	Of metric tons per day and types of food and agriculture products imported into the AO to meet the needs of its civilian inhabitants.
20	Number	Of metric tons per day and types of food and agriculture products exported from the AO that are surplus to its requirements.
21	Cost	Of direct support/subsidies to provide necessary food and agriculture support to sustain the civilian population of an AO.

ART 6.14.6.16 PROVIDE PROPERTY CONTROL SUPPORT

6-174. Identify private and public property, and facilities available for military use, and recommend policy and procedures to obtain them. Coordinate military acquisition of civilian property and facilities needed by military forces. Establish policies and procedures concerning custody and administration of private and public property. Control negotiable assets and resources of potential military use that are not otherwise under the supervision of other agencies. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The property control system within the AO supports the mission of US forces within the AO.
02	Yes/No	The unit establishes liaison with civilian and military/Corps of Engineers property control agencies, evaluates the current property control system, and develops plans that will improve the existing property control system of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To prepare property acquisition plans. Property acquisition plans classify the property to be acquired, identifies and coordinates the acquisition of property for military use; prescribes a recording system for property acquired by the military from civilian sources; prescribes measures to protect and preserve civilian ownership records, prescribes measures to safeguard and properly manage the acquired property, plans for scheduling the acquisition of property, and plans for controlling negotiable assets and resources of potential military use that are not under the supervision of other agencies.
05	Time	To review property control support plans for compliance with international laws, treaties, and agreements.
06	Percent	Difference between planned and actual requirements for property acquisition and control within the AO.
07	Percent	Of planned property acquisitions within the AO completed.
08	Percent	Of AO acquired for US military use.
09	Number	Of US property control teams operational within the AO.
10	Number	Size, and types of property used to support military operations in AO.
11	Number	Of instances when United States is not able to establish property control over civilian property acquired within the AO.
12	Cost	To establish and maintain property controls over civilian property acquired within the AO.

ART 6.14.6.17 PROVIDE CIVIL PRINT INFORMATION SUPPORT

6-175. Advise, assist, supervise, control, or operate civil print information agencies. Disseminate proclamations, ordinances, and notices. Advise and assist allied governments, when required. Implement civil censorship policies. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The civil print information system within the AO supports the mission of US forces within the AO.
02	Yes/No	The unit establishes liaison, evaluates the current civil print information systems, and develops plans that will improve the existing civil print information systems of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Time	To establish liaison with civilian print media agencies within the AO.
05	Time	To identify available civilian print media resources and determine their conditions and capabilities.
06	Time	To plan the use and supervision of government and public print media systems within the AO.
07	Time	To conduct legal review of proposed changes to print media controls and regulations.
08	Time	From making changes to existing laws and ordinances to when the population is informed of the changes.
09	Time	To conduct civilian censorship program of print media.
10	Time	To screen print media reporters, editors, columnists, and print support staff personnel for political beliefs.
11	Percent	Of civilian print media production resources within the AO under US control.
12	Percent	Of civilian population with access to print media by type (road signs, posters, newspapers, magazines, and leaflets).
13	Percent	Of civilian population whose only source of print media is under US control.
14	Percent	Of civilian population that is literate.
15	Number	And types of civilian print media production means operable within the AO.
16	Number	Of print media writers and print support personnel removed from their positions because of possible disagreements with US policy within the AO.
17	Number	Of US personnel used to provide civil print information support within the AO.
18	Cost	To provide civil print formation support within the AO.

ART 6.14.6.18 PROVIDE CULTURAL AFFAIRS SUPPORT

6-176. Provide information to military forces on the social, cultural, religious, and ethnic characteristics of the local populace. Develop codes of behavior to educate US forces in order to reduce acts contrary to local customs and practice. Locate and identify religious buildings, shrines, and consecrated places, and recommend restrictions on their use. Act as a

disinterested third party in negotiations between opposing ethnic, cultural, religious, and social groups in the AO. Function in a liaison capacity between US commanders and leaders of local social, cultural, religious, and ethnic groups. Consistent with mission requirements, recommend methods and techniques of operation that will be most acceptable to the local population. (FM 41-10) (USAJFKSWCS)

No.	Scale	Measure
01	Yes/No	The cultural affairs support system in AO supports mission of US forces.
02	Yes/No	The unit establishes liaison, assesses the foreign nation's social, cultural, religious, and ethnic characteristics, and develops plans that will improve the existing civil print information systems of the foreign nation.
03	Yes/No	The supporting civil affairs staff finalizes the courses of action and briefs the supported commander and staff.
04	Yes/No	US forces act as the disinterested party in negotiations between opposing ethnic, cultural, religious, and social groups in the AO.
05	Time	To educate US forces to reduce acts contrary to local customs and practice.
06	Time	To develop, coordinate, and enforce codes of behavior that complement local customs.
07	Time	To conduct liaison with local social, cultural, religious, and ethnic leaders.
08	Number	And types of restrictions placed on the use of religious buildings, shrines, consecrated places, and property by the civilian population and military forces.
09	Number	And types of restrictions placed on the use of historical buildings and property by the civilian population and military forces.
10	Number	And types of restrictions placed on the use of social gathering places by the civilian population and military forces.
11	Cost	To provide cultural affairs support within the AO.

ART 6.14.7 CONDUCT NEGOTIATIONS WITH AND BETWEEN OTHER GOVERNMENTAL AND NONGOVERNMENTAL ORGANIZATIONS

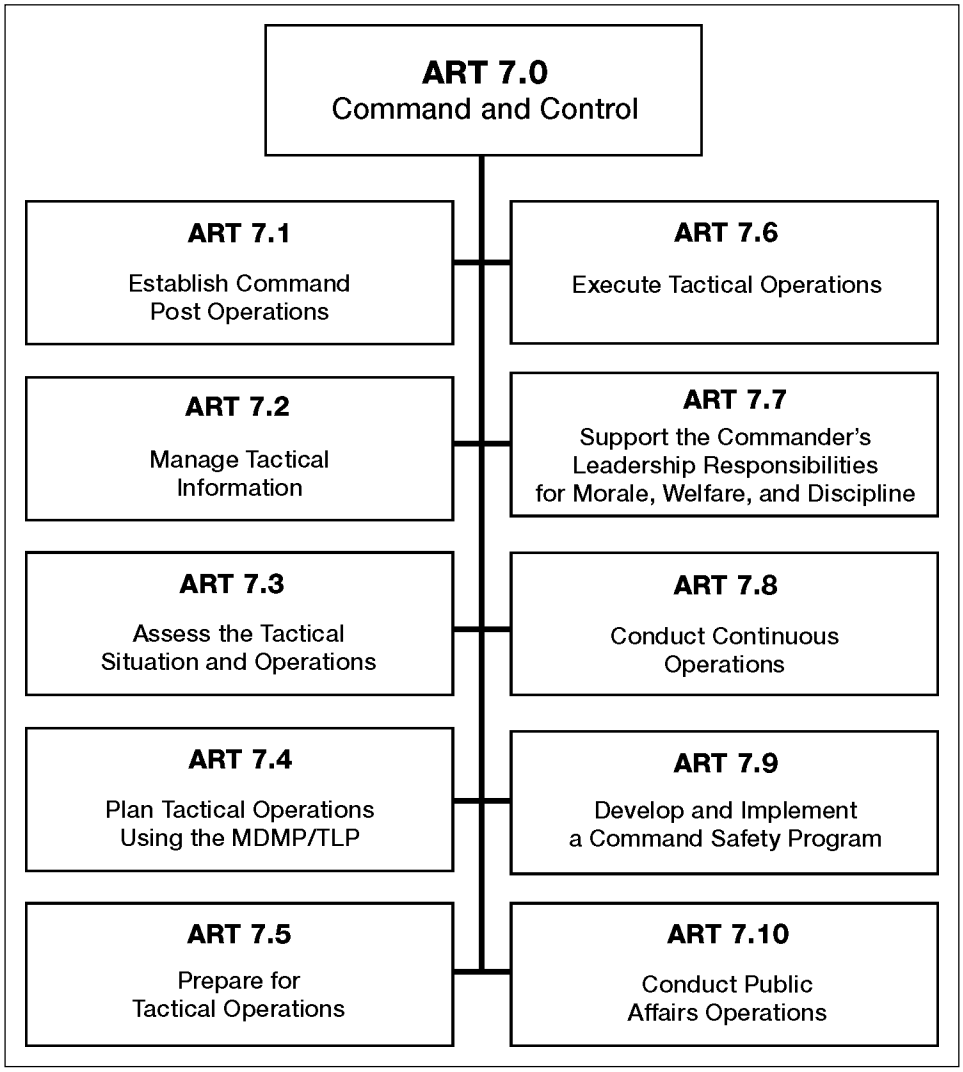
6-177. Conduct negotiations between the Army and other US governmental agencies and nongovernmental organizations. These negotiations can range widely in size and scope. (FM 3-07) (USACAC)

No.	Scale	Measure
01	Yes/No	The outcome of the negotiation process supports accomplishing the mission of US forces in the AO.
02	Yes/No	US forces act as the disinterested party in negotiations between opposing ethnic, cultural, environmental, commercial, religious, and social groups in the AO.
03	Yes/No	Outcome of the negotiations conditionally agreed on before the start of negotiations.
04	Yes/No	Negotiating team avoided making the initial offer in the negotiations.
05	Yes/No	Negotiating team kept the objective of the negotiations in mind and avoided the big picture because of focusing on single issues.

No.	Scale	Measure
06	Yes/No	Negotiating team discovered additional variables/concessions/bargaining chips during the conduct of the negotiations.
07	Yes/No	US negotiator walked away from the negotiations.
08	Yes/No	Negotiating team kept accurate notes on progress of negotiations that may be referred to if the other party forgets, misunderstands, or attempts to distort interpretations of what has been discussed and agreed.
09	Yes/No	Negotiating team summarized and confirmed the understandings of all parties continually.
10	Yes/No	Negotiating team has the skills to conduct negotiations. This includes good communications skills, ability to use the dynamics of conflict, and knowledge of the area, culture, economies, political philosophy, language, customs, history, wants, needs, goals, probable assumptions, and communications/negotiation styles of the other parties to the negotiations. The negotiating team must also have a thorough understanding of US interests and goals for the negotiations.
11	Yes/No	Negotiating team's higher headquarters approved the negotiating team's concessions and positions.
12	Time	To conduct background information on the parties involved in the negotiations to identify needs and interests to include personal and emotional aspects.
13	Time	To establish the conditions necessary for the conduct of successful negotiations. This includes building trust, rapport, and empathy with the other individuals involved in the negotiations.
14	Time	To determine negotiating concessions and bargaining chips that can be exploited during the conduct of negotiations.
15	Time	To conduct legal review of agreements reached during negotiations.
16	Percent	Of desired objectives obtained during negotiations.
17	Percent	Of time that the US side gets something in exchange for some type of concession in its negotiating position.
18	Number	Of negotiations currently ongoing within the AO and their topics.
19	Cost	Of conducting negotiations with and between other governmental and nongovernmental organizations.

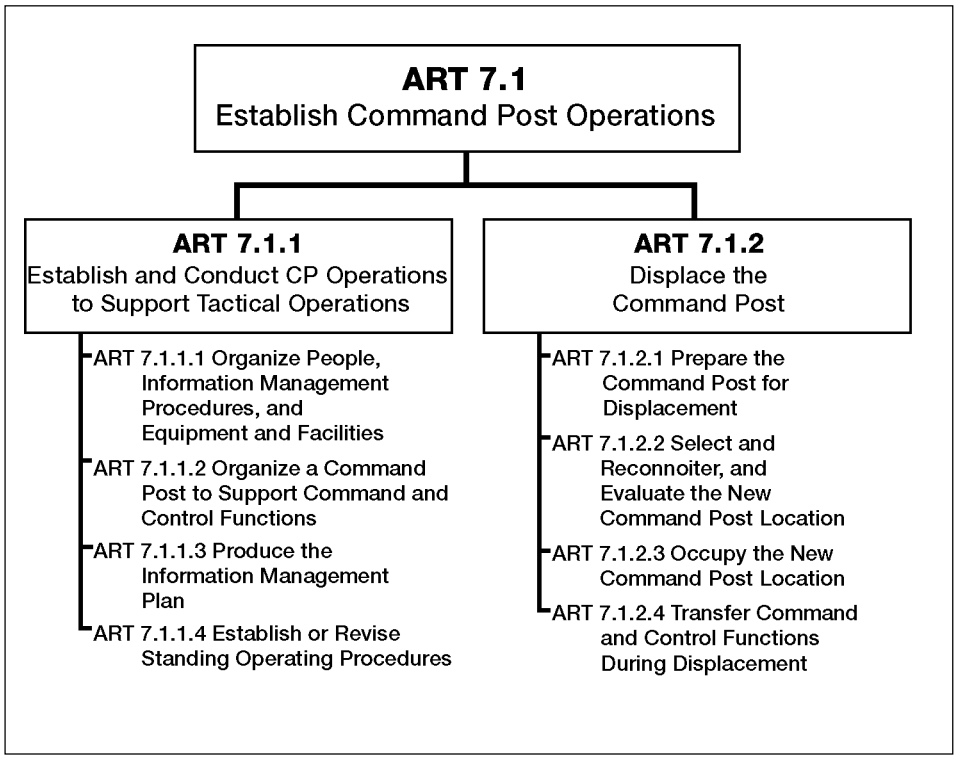
Chapter 7

ART 7.0: The Command and Control Battlefield Operating System



The command and control BOS includes collective tasks associated with supporting the exercise of authority and direction by a properly designated commander over assigned and available forces in the accomplishment of the mission. Command and control has two components: the commander and the C2 system. The C2 system is the

arrangement of personnel, information management, procedures, and equipment and facilities essential to the commander to conduct (plan, prepare for, execute, and continuously assess) operations. The C2 system supports the commander's ability to make informed decisions, delegate authority, and synchronize the BOS toward achieving a common goal. It includes acquiring and managing information, maintaining situational understanding, supporting commander's visualization and maintaining staff estimates, applying risk management, and directing and leading subordinates. Moreover, the C2 system supports the ability of commanders to adjust plans for future operations, even while focusing on the current operation. Staffs work within the commander's intent to direct units and control resource allocations. They also are alert to spotting enemy or friendly situations that require command decisions and advise commanders concerning them.



SECTION I – ART 7.1: ESTABLISH COMMAND POST OPERATIONS

7-1. Organize, create/erect, operate, and move the principal facility used by the commander to exercise command and control of tactical operations. The command post performs the C2 functions discussed in succeeding subtasks. (FM 6-0) (USACAC)

Note: ART 5.3.5.5 (Conduct Local Security Operations) and ART 5.3.5.6 (Employ Operations Security) address tasks inherently associated with conduct of command post operations. The measures of performance for those tasks are not included with the measures of performance of any of the tasks in this chapter since they are separate tasks.

No.	Scale	Measure
01	Yes/No	CP supports the commander in exercising C2 of his unit to accomplish the mission within the time and parameters specified by the higher commander and as stated in the operations order.
02	Time	To form CP from fully operational headquarters.
03	Time	To determine CP structure.
04	Time	To accomplish missions.
05	Percent	Of tactical actions or operations able to be executed.
06	Percent	Of missions accomplished.

ART 7.1.1 ESTABLISH AND CONDUCT COMMAND POST OPERATIONS TO SUPPORT TACTICAL OPERATIONS

7-2. Organize, create/erect, and operate the command post in a manner that allows it to perform C2 functions most effectively for a particular operation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	CP supports the commander in exercising C2 of his unit to accomplish the assigned mission within the time the operations order specifies.
02	Yes/No	CP can communicate critical information with higher and subordinate headquarters, adjacent headquarters, and supported headquarters in near-real time.
03	Time	To establish CP for operations.
04	Percent	Of C2 functions performed to standard.
05	Percent	Of C2 nodes that possess required communications capabilities.
06	Percent	Of essential C2, communications, and computer systems accessible from all subordinate locations.
07	Percent	Of required staff positions and materiel filled.
08	Number	Of times that subordinate commanders are unable to communicate with force headquarters.

ART 7.1.1.1 ORGANIZE PEOPLE, INFORMATION MANAGEMENT PROCEDURES, AND EQUIPMENT AND FACILITIES

7-3. Establish relationships among the personnel, information management procedures, and equipment and facilities essential for using and communicating the COP and execution information to achieve situational understanding and to direct the conduct (planning, preparing for, executing, and assessing) of operations. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Organization and level of resources meet C2 system requirements in supporting effective C2.
02	Time	To submit host-nation supportability requests.
03	Time	To obtain host-nation supportability approval.
04	Time	To form force staff (from activation order).
05	Time	To staff and equip C2 system.
06	Time	To establish and approve C2 system architecture.
07	Percent	Of required C2 system resources identified.
08	Percent	Of required C2 system resources provided.

ART 7.1.1.2 ORGANIZE COMMAND POST TO SUPPORT COMMAND AND CONTROL FUNCTIONS

7-4. Arrange command post equipment and facilities in a manner that effectively supports the personnel performing C2 functions for a specific operation or situation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	CP organization facilitates performing C2 functions for a specific operation.
02	Time	After constitution of CP to establish “daily battle rhythm.”
03	Percent	Of normal operations covered by procedures.
04	Number	Of incidents of friendly forces orders/taskings significantly delayed because of unclear relationships within headquarters.
05	Number	Of incidents of friendly forces orders/taskings significantly delayed.

ART 7.1.1.3 PRODUCE THE INFORMATION MANAGEMENT PLAN

7-5. Prepare the sequence of activities that provides relevant information to the right person at the right time in a usable form for exercising C2 in a specific operation. The plan includes procedures and information systems used in information management. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Information management plan supports the unit’s mission accomplishment.
02	Time	To produce information management plan for operation.
03	Percent	Of information management requirements covered by plan.
04	Number	Of instances of foreseeable information management requirements not covered.
05	Number	Of instances of excessive requests from sources for information.
06	Number	Of instances of relevant information not provided either to the right person, at the right time, or in a usable form due to deficiencies in information management plan.

ART 7.1.1.4 ESTABLISH OR REVISE STANDING OPERATING PROCEDURES

7-6. Create or modify a set of instructions covering those tasks and functions that lend themselves to a definite or standardized procedure without a loss of

effectiveness; the SOP is effective unless ordered otherwise to meet altered conditions. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit's SOP or its revisions facilitate mission accomplishment and BOS integration.
02	Yes/No	Commands have policies and procedures for operation and maintenance of C2 systems.
03	Yes/No	Commands have restoration plans for critical failures.
04	Percent	Of procedures revised during operations.
05	Percent	Of total "down" time for operational C2, communications, and computer systems attributed to failure to follow established policies and procedures.

ART 7.1.2 DISPLACE THE COMMAND POST

7-7. Move or transfer the principal facility used by the commander to exercise command and control of tactical operations in order to support C2 of a specific operation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	CP displaces when necessary and resumes supporting the commander within the time the operations order specifies.
02	Time	To displace and establish CP in new location.
03	Time	To resume full operations in new location.
04	Number	Of incidents of degraded C2 effectiveness during displacement.
05	Number	Of incidents of operations affected negatively by displacement

ART 7.1.2.1 PREPARE THE COMMAND POST FOR DISPLACEMENT

7-8. Execute activities before movement to make the command post more ready to move. These activities include, but are not limited to, dismantling information systems and associated networks, dismantling the facilities and equipment, and packing elements of the command post according to load plans. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	CP prepares for displacement within the time either the unit SOP or operations order specifies.
02	Time	Before displacement to publish plan.
03	Time	To dismantle information systems and networks and facilities and equipment.
04	Time	To pack for displacement.
05	Percent	Of CP packed according to loading plans/SOP.
06	Number	Of incidents of lost equipment.

ART 7.1.2.2 SELECT, RECONNOITER, AND EVALUATE THE NEW COMMAND POST LOCATION

7-9. Decide and confirm the suitability of the location to which the command post should displace, including the time of/for movement. (FM 6-0) (USACAC)

Note: ART 2.3 (Conduct Tactical Troop Movements) covers movement of command posts.

No.	Scale	Measure
01	Yes/No	Selection, reconnoitering, and evaluation of the new command post location produces a new CP location that effectively supports the exercise of C2.
02	Time	To form reconnaissance party.
03	Time	For reconnaissance party to decide and confirm suitability of new location.
04	Time	For reconnaissance party to communicate findings to CP.
05	Percent	Of decisions of reconnaissance party valid for CP functions.

ART 7.1.2.3 OCCUPY THE NEW COMMAND POST LOCATION

7-10. Execute activities following a tactical or administrative movement to establish and conduct command post operations. (FM 6-0) (USACAC)

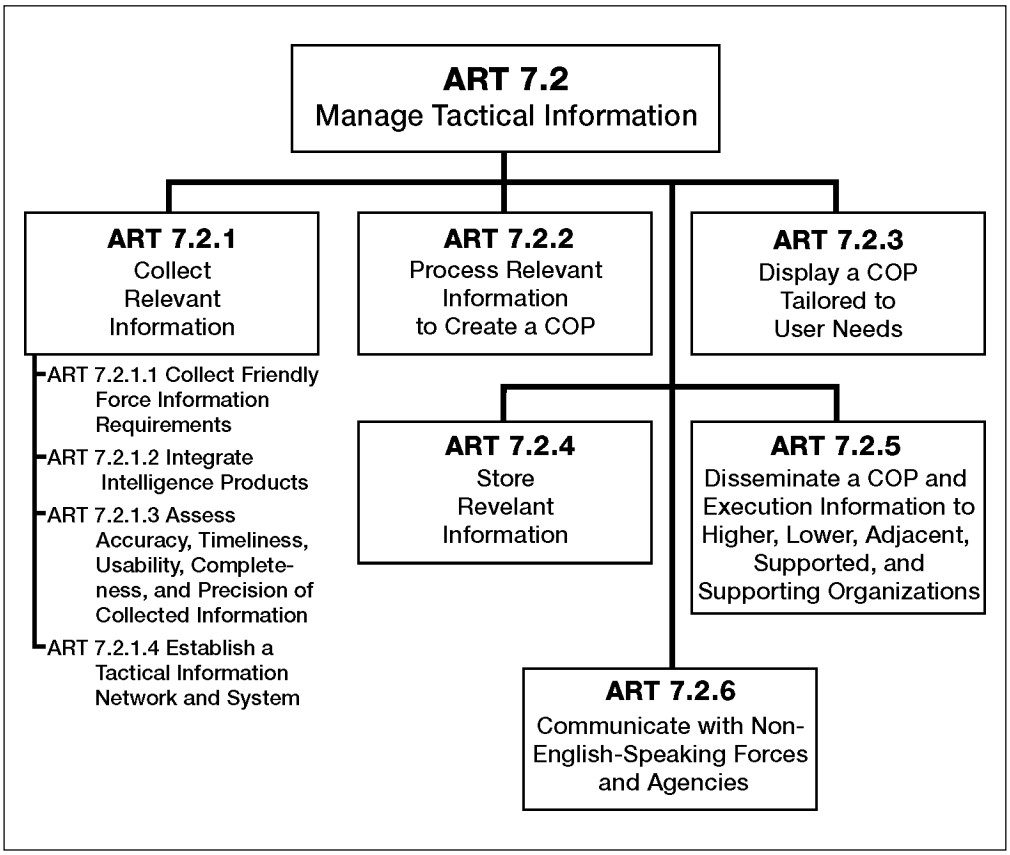
No.	Scale	Measure
01	Yes/No	Occupation of the new CP location allows the command post to support the commander effectively in his exercise of C2 and within the time the unit SOP or operations order specifies.
02	Yes/No	Location of new CP identified in accordance with security requirements.
03	Time	To account for 100 percent of personnel and equipment after last arrival at final destination.
04	Time	To unpack equipment from transport.
05	Time	To set up facilities and information systems and networks for operation.
06	Time	To reestablish communications links after arrival.
07	Percent	Of C2 functions performed effectively after arrival.

ART 7.1.2.4 TRANSFER COMMAND AND CONTROL FUNCTIONS DURING DISPLACEMENT

7-11. Reassign C2 functions from the old location to the new location. Maintain C2 functions during the move without disrupting performance of C2 functions for the force. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	C2 functions transfer allows the unit's command and control system to maintain C2 functions without disruption.
02	Time	To transfer C2 to alternate CP.
03	Percent	Of effectiveness of alternate CP.
04	Percent	Of communication with subordinate headquarters during displacement.

No.	Scale	Measure
05	Percent	Of effectiveness of C2 functions during displacement.
06	Percent	Of C2 functions not performed during displacement.



SECTION II – ART 7.2: MANAGE TACTICAL INFORMATION

7-12. Direct relevant information to the right person at the right time in a usable format to facilitate situational understanding and decision making. Use procedures and information systems to collect, process, display, store, and disseminate data and information. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Tactical information and data collected, processed, displayed, stored, and disseminated directs relevant information to the right persons at the right time in a usable format to facilitate situational understanding and decision making.
02	Time	To direct, establish, and control the means by which the various staffs and forces send and receive operationally significant data/information, in order to minimize operations delayed/affected because of lack of information.
03	Time	For force COP to reflect real-world situation.

No.	Scale	Measure
04	Percent	Of critical information acquired and disseminated to subordinate commanders and appropriate members of subordinate staffs.
05	Percent	Of time, data presented to decision maker in suitable format.
06	Number	Of incidents of critical information not reaching person responsible for action in a timely manner.

ART 7.2.1 COLLECT RELEVANT INFORMATION

7-13. Continually collect relevant information about METT-TC from the information environment by any means for processing, displaying, storing, and disseminating to support conducting (planning, preparing for, executing, and assessing) current and future operations. (FM 6-0) (USACAC)

Note. The distinction between ART 7.2.1 and ART 1.3 (Collect Intelligence, Surveillance, and Reconnaissance) is that ART 1.2 involves collecting information from the operational environment while ART 7.2.1 involves integrating intelligence information and products that exist within the C2 system.

No.	Scale	Measure
01	Yes/No	Information collected supports the commander's decision-making process.
02	Time	Since latest relevant information collected.
03	Percent	Of decisions delayed awaiting collection of appropriate data.
04	Percent	Of requested information collected within time desired.
05	Percent	Quality of collected information.

ART 7.2.1.1 COLLECT FRIENDLY FORCE INFORMATION REQUIREMENTS

7-14. Collect data about friendly forces from the information environment for processing, displaying, storing, and disseminating to support C2 functions. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Information collected about friendly forces supports the commander's decision-making process.
02	Yes/No	Information collected is current.
03	Percent	Accuracy of information on essential logistics, maintenance, and personnel requirements and reports.
04	Percent	Accuracy of information regarding subordinate unit deployments.
05	Percent	Accuracy of data used by operations staff.
06	Percent	Accuracy of subordinate unit status.
07	Percent	Of friendly units/organizations and personnel with current status known.

ART 7.2.1.2 INTEGRATE INTELLIGENCE PRODUCTS

7-15. Collect intelligence products from intelligence sources and combine them with FFIR for use in C2 functions. (FM 6-0) (USACAC)

ART 1.3 (Collect Intelligence, Surveillance, and Reconnaissance) involves collecting information about the enemy/adversary and environment.

No.	Scale	Measure
01	Yes/No	Intelligence products integrated by information management support the commander's decision-making process.
02	Time	To establish connectivity with component intelligence agencies, unified command and national intelligence agencies (after arrival).
03	Time	To integrate intelligence products by users or COP.
04	Percent	Accuracy of intelligence situation displays integrated with other mission-essential information.
05	Percent	Of intelligence products properly integrated with other information.

ART 7.2.1.3 ASSESS ACCURACY, TIMELINESS, USABILITY, COMPLETENESS, AND PRECISION OF COLLECTED INFORMATION

7-16. Apply the criteria of accuracy, timeliness, usability, completeness, and precision to evaluate the quality of relevant information collected. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Relevant information that meets the quality criteria serves the commander's needs.
02	Time	To conduct assessment of collected relevant data.
03	Percent	Of available information examined and considered in latest status reporting.
04	Percent	Accuracy of data transmitted/disseminated.
05	Percent	Of time information passed within established time criteria.
06	Percent	Of time information on CCIR passed within established time criteria.
07	Percent	Of time mission-essential intelligence and threat assessments passed within established time criteria.
08	Percent	Of reinforcing or supporting forces, commander has accurate information.
09	Percent	Of reports with no significant errors.

ART 7.2.1.4 ESTABLISH A TACTICAL INFORMATION NETWORK AND SYSTEM

7-17. Install, operate, and maintain networks that ensure information systems can perform information management activities. ART 7.2.1.4 includes repositioning information systems (such as communications nodes) and managing the electromagnetic spectrum as necessary to maintain continuity of C2. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Operations of the tactical information network and system perform information management activities effectively in support of the commander's decision making.
02	Time	To queue high precedence messages.
03	Time	To integrate new headquarters into existing SIPRNET.

No.	Scale	Measure
04	Time	To establish integrated communications system.
05	Time	To establish both data and voice communication with unified command and its components.
06	Time	To submit frequency requests.
07	Time	To obtain frequency approval.
08	Percent	Of subordinate commanders and supporting staffs in communication with force headquarters.
09	Percent	Of C2, communications, and computer support systems, operational.
10	Percent	Of C2, communications, and computer support systems that meet command reliability standards.
11	Percent	Of C2, communications, and computer support systems equipment down for unscheduled maintenance.
12	Percent	Of traffic, sent on non-dedicated or non-DOD lines or circuits.
13	Percent	Of communications equipment, circuits, and connectivity with status accurately displayed.
14	Percent	Of communications outages with adequate backup communications paths.
15	Percent	Of time, essential C2, communications, and computer systems accessible from all locations.
16	Percent	Of force headquarters local area networks capable of interoperating.
17	Percent	Of time communications connectivity maintained with all units.
18	Percent	Of time communications networks fully operational.
19	Percent	Of time voice and data communications (unsecure and secure) maintained.
20	Percent	Of equipment interoperability problems that result in late or lost data.
21	Percent	Of resources requested to fill all shortfalls.
22	Percent	Of critical C2, communications, computer, and intelligence architecture nodes identified in the operation plan.
23	Number	Of instances of delay, disruption, or corruption of operational C2, communications, and computer systems due to failure to follow established policies and procedures.

ART 7.2.2 PROCESS RELEVANT INFORMATION TO CREATE A COMMON OPERATIONAL PICTURE

7-18. Add meaning to relevant information by formatting, plotting, translating, correlating, aggregating, organizing, categorizing, analyzing, and evaluating it to create the COP. (FM 6-0) (USACAC)

Note. The COP is an operational picture tailored to the user's requirements, based on common data and information shared by more than one command. The COP facilitates collaborative planning and helps all echelons to achieve situational understanding.

No.	Scale	Measure
01	Yes/No	Meaning added to relevant information to create the COP supports the commander's decision-making process.
02	Time	To compile appropriate reports.
03	Time	To provide analysis and evaluation to information.
04	Percent	Of time, accurate and current COP maintained within area of operation.
05	Percent	Of reports processed within time limits.

ART 7.2.3 DISPLAY A COMMON OPERATIONAL PICTURE (COP) TAILORED TO USER NEEDS

7-19. Present relevant information in audio or visual formats that convey the COP for decision making and exercising other C2 functions. The COP format should be easily understandable to the user and tailored to the needs of the user and the situation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	COP is tailored to the user's needs and the situation is easily understandable.
02	Time	Between the force COP and the real-world situation, in order to maintain operational information, force status, and the capability to respond to an emerging situation and/or project branches/sequels.
03	Time	To display shared local databases.
04	Time	For decision maker to understand display in decision making.
05	Percent	Accuracy of mission-essential information maintained on situation displays.
06	Percent	Of current operational data displays.

ART 7.2.4 STORE RELEVANT INFORMATION

7-20. Retain relevant information in any form that allows processing, displaying, or disseminating to authorized users when and as required to exercise C2. ART 7.2.4 includes maintaining distributed or common databases. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Stored relevant information is readily available for processing, displaying, or disseminating when and as required to support exercise of C2.
02	Time	To post unit reports to appropriate databases or pass to work centers (from receipt).
03	Time	To access and display shared remote databases.
04	Time	To enter most current information on force status.
05	Time	To access shared local databases.
06	Percent	Of relevant information required already in databases.

ART 7.2.5 DISSEMINATE COMMON OPERATIONAL PICTURE AND EXECUTION INFORMATION TO HIGHER, LOWER, ADJACENT, SUPPORTED, AND SUPPORTING ORGANIZATIONS

7-21. Convey relevant information of any kind from one person or place to another by any means to improve understanding or to initiate or govern action, conduct, or procedure. (FM 6-0) (USACAC)

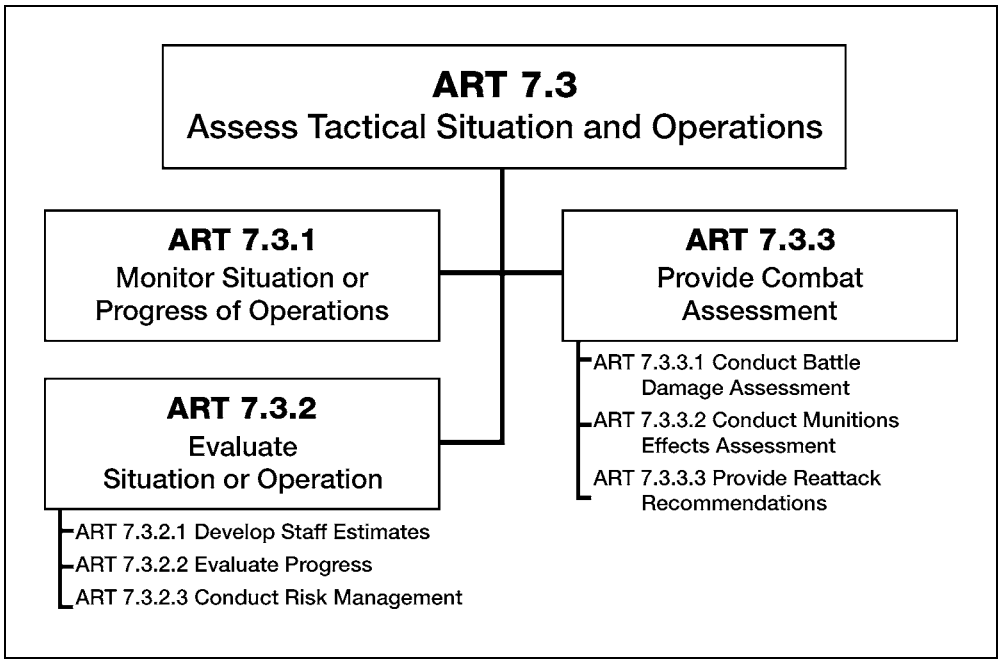
No.	*Scale*	*Measure*
01	Yes/No	COP and execution information disseminated between headquarters in time and with sufficient quality and quantity to allow those headquarters to initiate actions that accomplish the commander's intent.
02	Time	To process and disseminate status information (to subordinate units).
03	Time	To communicate all approved orders and plans to subordinate and adjacent units.
04	Time	After approval, all orders and plans received by components and adjacent units.
05	Time	To generate and forward situation reports.
06	Percent	Of organizations or units receiving latest information.
07	Percent	Of command plans, reports, and other information, passed error free.
08	Percent	Of addressees that received message.
09	Percent	Of addressees that received critical planning messages (such as warning orders).
10	Percent	Of messages sent outside normal communications channels.
11	Percent	Accuracy of orders and requirements transmitted/disseminated within reporting criteria.
12	Percent	Of information that gets to appropriate people.
13	Percent	Of reports disseminated to all agencies within time limits.
14	Percent	Of time mission-essential information passed within established criteria.
15	Number	Of instances where incoming information (which could affect outcome of operation) is not received by the person responsible for action.

ART 7.2.6 COMMUNICATE WITH NON-ENGLISH SPEAKING FORCES AND AGENCIES

7-22. Communicate verbally, non-verbally, in writing, or electronically in the appropriate language of allied, host-nation, nongovernmental, and indigenous forces and agencies in order to accomplish all C2 requirements. This task requires U.S personnel to establish and maintain effective rapport with the leaders and staff of allied, host-nation, or indigenous forces. (FM 6-0) (USACAC)

Note: Classified and sensitive information is not passed to allies and coalition partners in violation of policy guidance.

No.	Scale	Measure
01	Yes/No	Communications with non-English speaking personnel sufficient to accomplish all C2 requirements to allow mission accomplishment effectively by force as a whole.
02	Yes/No	Classified and sensitive information protected when communicating with allies and coalition partners.
03	Time	To communicate information or orders from one language to another orally or in writing.
04	Time	To develop interpersonal relationships.
05	Percent	Of needed information, not passed to or received by allies (due to lack of equipment interoperability).
06	Percent	Of needed information not passed to allies due to classification restraints.
07	Percent	Accuracy of communication with non-English-speaking forces and agencies.
08	Percent	Of required linguist support provided.
09	Number	Of missions not fulfilled/commitments not met due to faulty/lacking language support.
10	Number	Of cultural mistakes occurring while dealing with non-English-speaking forces or agencies.



SECTION III – ART 7.3: ASSESS TACTICAL SITUATION AND OPERATIONS

7-23. Continuously monitor the situation and progress of the operation. Evaluate the situation or operation against criteria of success in order to make decisions and adjustments throughout the operations process (planning, preparing, executing and assessing). (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Assessment supports decision making and adjustments during the operations process.
02	Time	To compare situation against criteria of success.
03	Time	For commander to assess progress.
04	Percent	Of enemy actions or operations forecast.
05	Percent	Of time event of interest occurs without options available.
06	Percent	Accuracy of commander's assessment of progress.

ART 7.3.1 MONITOR SITUATION OR PROGRESS OF OPERATIONS

7-24. Collect relevant information on the situation or operation in order to evaluate the actual situation or progress of the operation and support decision making. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Relevant information collected accurately reflects the situation or progress of the operation and supports decision making.
02	Time	Lag in currency of information on adjacent military forces or non-DOD agencies.
03	Time	To obtain information on changes to tactical situation.
04	Time	Since update of force situation.
05	Time	To access current situation.
06	Percent	Of time, commander learns of emerging tactical event from staff.
07	Number	Of incidents where the commander was surprised by critical/emerging event (METT-TC) (not briefed).
08	Number	Of instances when the commander learns of emerging events from sources outside his staff.

ART 7.3.2 EVALUATE SITUATION OR OPERATION

7-25. Analyze and compare the actual situation or progress of the operation against criteria of success. Highlight variances between the planned situation at that time in the operation and the current situation, and forecast the degree of mission accomplishment. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Evaluation reflects reality of the degree of mission accomplishment and forecasts the degree of mission accomplishment.
02	Time	To evaluate progress or situation and determine type of decision.
03	Time	To complete evaluation of situation or progress.
04	Percent	Accuracy of evaluation of situation or progress.
05	Percent	Of accurate friendly evaluations.
06	Number	Of opportunities or threats recognized.

ART 7.3.2.1 DEVELOP STAFF ESTIMATES

7-26. Use the staff estimate procedure—consisting of significant facts, events, and conclusions based on analysis—as the staff element's means of assessing within their functional field. Staff estimates consider both quantifiable and intangible aspects of military operations. They are as thorough as time permits, and updated regularly as part of an ongoing process. They support assessing throughout the operations process. Staff estimates also support the commander's visualization of the operation. (FM 6-0) (USACAC)

Note: The intelligence staff estimate is the product of IPB. See ART 1.1.1 (Perform Intelligence Preparation of the Battlefield).

No.	Scale	Measure
01	Yes/No	Staff estimates are accurate and support the commander's visualization of the operation.
02	Time	Into future, planning branches have been developed.
03	Time	From receipt of information to complete or update staff estimate.
04	Percent	Of decision points that have branches.
05	Percent	Of enemy actions or operations affected course of battle, but not forecast.
06	Percent	Of forecast branches appeared at execution.

ART 7.3.2.2 EVALUATE PROGRESS

7-27. Conclude whether the variances from the criteria of success of the current situation or progress of the operation are significant enough to affect accomplishing the mission or meeting the commander's intent and warrant adjustment. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	C2 system effectively concluded when the force accomplished the commander's intent or needed to adjust its course of action.
02	Time	For commander/staff to forecast degree of mission accomplishment based on variance.
03	Time	From receipt of information to complete evaluation of progress.
04	Percent	Accuracy of evaluation of variances.
05	Percent	Accuracy of forecast of progress and meaning of forecast.

ART 7.3.2.3 CONDUCT RISK MANAGEMENT

7-28. Identify and control hazards to protect the force and increase the chance of mission accomplishment. Use the risk management process throughout the conduct (planning, preparing, executing and assessing) of missions to recommend how to reduce tactical and accident risk. (FM 100-14) (USASC)

No.	Scale	Measure
01	Yes/No	Probability of successful mission accomplishment increased as a result of risk management process.

No.	Scale	Measure
02	Yes/No	Casualties and vehicle/building damage reduced because of the use of risk management techniques.
03	Time	To employ the risk management process.
04	Percent	Of identified significant risks to mission accomplishment and force protection.
05	Percent	Of identified risks that are determined to be acceptable by the commander.
06	Percent	Of hazards identified and mitigated.
07	Percent	Of residual risk accepted.
08	Percent	Of effect of risk on operation or casualties.
09	Number	And types of hazards not identified affecting operation or casualties.

ART 7.3.3 PROVIDE COMBAT ASSESSMENT

7-29. Determine the overall effectiveness of firepower employment during military operations. Firepower employed can be lethal and nonlethal in nature and delivered by direct and indirect fire systems. The objective of combat assessment is to identify recommendations for maneuver operations. Combat assessment is the overarching concept that consists of the conduct of battle damage and munitions effects assessments while providing reattack recommendations. (FM 34-1) (USAIC&FH)

No.	Scale	Measure
01	Yes/No	The commander determines the overall damage inflicted on the enemy by those direct and indirect fires employed during the conduct of a military operation.
02	Time	To commence follow-on operations or restrike, awaiting combat assessment.
03	Time	To complete combat assessment.
04	Time	To provide full assessment of attacks to force commander.
05	Time	To provide initial combat assessment of attacks to force commander.
06	Time	To perform the combat assessment functions of battle damage assessment, mission assessment, and munitions effectiveness assessment based on commander's guidance/ objectives.
07	Percent	Of HPTs assessed as killed later assessed as being mission capable.
08	Percent	Difference between higher level and force assessment of effectiveness.
09	Percent	Of targets with combat assessment data available.
10	Percent	Of targets unnecessarily reattacked.

ART 7.3.3.1 CONDUCT BATTLE DAMAGE ASSESSMENT

7-30. Provide a timely and accurate estimate of damage resulting from the application of military force, either lethal or nonlethal, against a target. Battle damage assessment provides commanders with a timely and accurate snapshot of their effect on the enemy. This helps commanders determine when or if their targeting effort is accomplishing their objectives. This task also includes determining if the application of military force results in the release of hazardous material. (FM 6-20) (USAFAS)

Note: This task is supported by the ART 1.4.3, Provide Intelligence Support to Combat Assessment, task branch. It is also associated with the decide, detect, deliver, and assess (D3A) process.

No.	Scale	Measure
01	Yes/No	The commander accurately determines the damage to the enemy from the overall effects of firepower employed during the conduct of military operations.
02	Time	To commence follow-on operations or reattack (following receipt of assessment).
03	Time	To complete full assessment of attacks after time on target.
04	Time	To make initial assessment of attacks after time on target.
05	Time	To provide full assessment of attacks to force commander.
06	Time	To provide initial battle damage assessment of attacks to force commander.
07	Percent	Of HPTs assessed as killed later assessed as being mission capable.
08	Percent	Of targets have BDA based on more than one type of system.
09	Percent	Of targets unnecessarily reattacked.
10	Percent	Difference between higher level and force assessment of effectiveness.

ART 7.3.3.2 CONDUCT MUNITIONS EFFECTS ASSESSMENT

7-31. Assess the military force in terms of the weapons systems and munitions effectiveness. This assessment is used as the basis of recommendation for changes to increase the effectiveness of methodology, tactics, weapon system, munitions, and weapon delivery parameters. The munitions effects assessment takes place concurrently and interactively with BDA. This assessment is primarily the responsibility of operations and fire support personnel, with input from the intelligence BOS. (FM 6-20-10) (USAFAS)

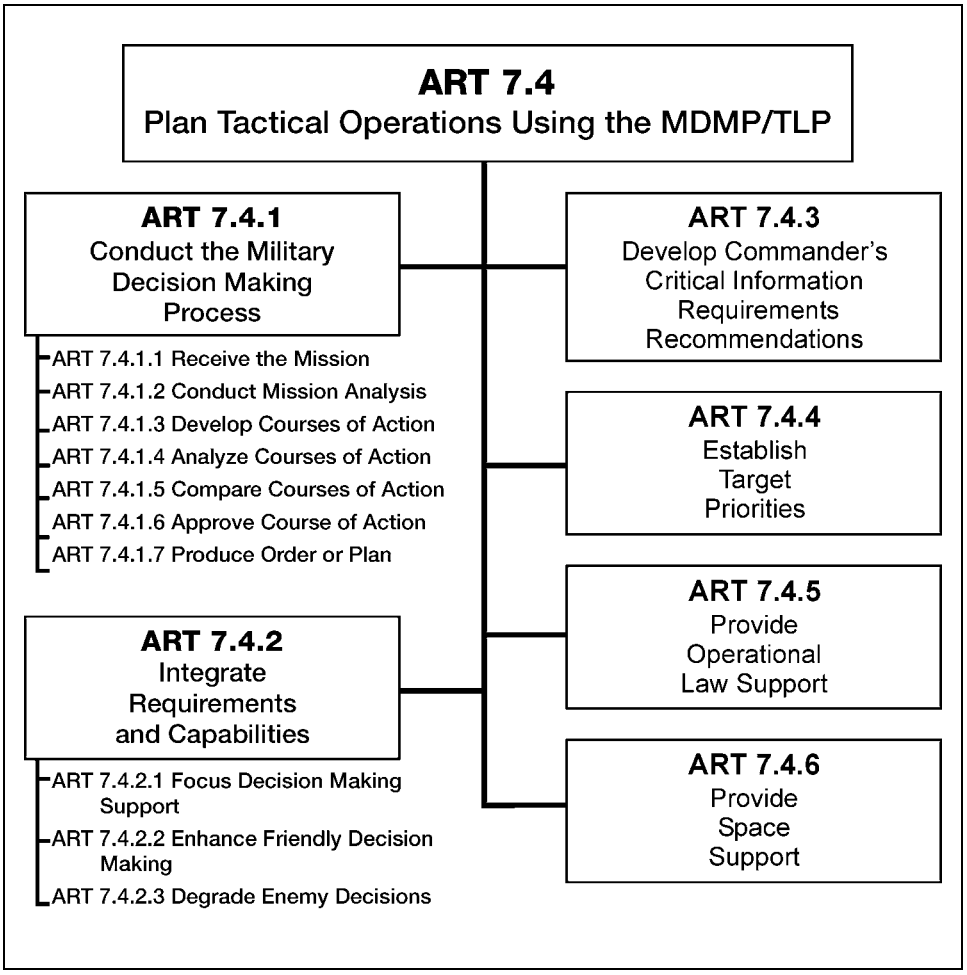
No.	Scale	Measure
01	Yes/No	The commander accurately determines the overall effects of munitions and weapon systems employed against specific types of targets during the conduct of military operations.
02	Time	To commence follow-on operations or reattack (following receipt of munitions effects assessment).
03	Time	To complete munitions effects assessment after attack.
04	Time	To provide full assessment of attacks to force commander.
05	Time	To provide initial munitions effects assessment of attacks to force commander.
06	Percent	Of HPTs assessed as killed later assessed as being mission capable.
07	Percent	Of HPTs require reattack.
08	Percent	Of HPTs successfully attacked.
09	Percent	Difference between higher level and force assessment of munitions effectiveness.

No.	Scale	Measure
10	Percent	Of targets unnecessarily reattacked.

ART 7.3.3.3 PROVIDE REATTACK RECOMMENDATION

7-32. Make recommendations to the commander, considering the level to which operational objectives have been achieved, regarding reattack, and other recommendations that address operational objectives relative to target, target critical elements, target systems, and enemy combat strengths. (FM 6-20-10) (USAFAS)

No.	Scale	Measure
01	Yes/No	Reattack recommendations were effective and efficient.
02	Time	To commence follow-on operations or execute other options.
03	Time	To provide full assessment of attacks to joint force commander.
04	Time	To assess reattack requirement (after attack).
05	Time	To provide initial reattack assessment of attacks to force commander.
06	Percent	Of HPT attacks unsuccessful.
07	Percent	Of HPTs assessed as killed later assessed as being mission capable.
08	Percent	Of HPTs that require reattack.
09	Percent	Of HPTs successfully attacked.
10	Percent	Difference between higher level and force assessment of reattack requirement.
11	Percent	Of targets unnecessarily reattacked.



SECTION IV – ART 7.4: PLAN TACTICAL OPERATIONS USING THE MILITARY DECISION MAKING PROCESS/TROOP LEADING PROCEDURES

7-33. Translate the commander's visualization into a specific COA for preparation and execution. Produce orders and plans that communicate the selected COA, intent, and decisions to subordinates, focusing on the expected results. (FM 101-5) (USACAC)

No.	*Scale*	*Measure*
01	Yes/No	Tactical planning produces a commander's decision, communicates an effective methodology, that facilitates mission accomplishment.
02	Yes/No	Subordinate unit staffs are able to digest the order produced by the military decision making process (MDMP).
03	Yes/No	Time is available for plan rehearsal and refinement.
04	Yes/No	Time management principals, such as maintaining established time line, were effectively used.
05	Time	Prior to execution, plan published and delivered.
06	Time	To complete an iteration of the MDMP/troop leading procedures (TLP).

No.	Scale	Measure
07	Percent	Of subordinate units that receive orders in time to plan, prepare, and execute.
08	Percent	Of time used to provide commander's intent.
09	Percent	Of available planning time allowed for subordinate planning and preparation.
10	Percent	Of subordinate commands clear about their immediate objectives.
11	Number	Of times a staff digresses to earlier MDMP steps, such as going back to mission analysis issues while developing courses of action.

ART 7.4.1 CONDUCT THE MILITARY DECISION MAKING PROCESS

7-34. Employ the logic and techniques of a prescribed analytical process, TLP or MDMP, to determine a unit's restated mission. Develop COAs to accomplish the mission. Recommend the most effective COA. Prepare orders and plans to communicate the selected COA, intent, and decisions to subordinates, focusing on the expected results. (FM 101-5) (USACAC)

Note: See FM 101-5 for a complete discussion of MDMP.

No.	Scale	Measure
01	Yes/No	Prescribed analytic process produces effective decision and order to guide execution.
02	Yes/No	Milestone criteria for plan development met.
03	Percent	Of completed planning documents passed to subordinates to allow parallel planning.
04	Percent	Of TLP/MDMP completed correctly.

ART 7.4.1.1 RECEIVE THE MISSION

7-35. To be given a mission by higher headquarters or deduce a need for a change in the current mission. This task involves preparing for mission analysis, to include collecting materials for analysis, receiving the commander's preliminary guidance, determining requirements and time available, and sending warning orders to subordinates. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Commander and staff understand all of the specified and implied tasks contained within their mission.
02	Yes/No	Commander provided adequate initial guidance.
03	Time	After receipt of mission, to issued initial planning guidance.
04	Time	To alert staff of receipt of new mission.
05	Time	To issue warning order.

ART 7.4.1.2 CONDUCT MISSION ANALYSIS

7-36. Analyze the received mission to define the tactical problem and begin to determine solutions. It results in a restated mission, the commander's

guidance, intent, initial CCIR, planned use of available time, and a warning order. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Develop and approve restated mission, commander's guidance, intent, CCIR, use of available time, and warning order.
02	Yes/No	Mission statement includes who, what, when, where, and why of the mission.
03	Yes/No	Time/distance analysis conducted.
04	Yes/No	Develop assumptions to replace missing or unknown facts that are necessary for continued planning.
05	Time	Planning guidance issued to staff and subordinate commands.
06	Time	To initiate preliminary movement.
07	Percent	Of critical information and staff estimates reviewed prior to mission analysis.
08	Percent	Of major topics within the IPB for which assessments are conducted.
09	Percent	Of assumptions proved to be either invalid or unrealistic and significantly affect the operation.
10	Percent	Of constraints identified that significantly affect the operation.
11	Percent	Of specified tasks derived in mission analysis and carried into planning.
12	Percent	Of implied tasks derived in mission analysis and carried into planning.
13	Percent	Of essential tasks derived in mission analysis and carried into planning.
14	Percent	Of specified and implied tasks that are identified as essential tasks and included in either the mission statement, commander's intent or concept of operations paragraphs of the operation order.
15	Percent	Of forces identified as required to accomplish the essential tasks.
16	Percent	Completeness of commander's guidance (coverage of functional areas).
17	Percent	Of planning time used to issue guidance.
18	Percent	Of ROE clearly understood.
19	Percent	Of subordinates accepting commander's intent without requests for clarification.
20	Number	Of amendments issued to planning guidance (due to requests for clarification).
21	Number	Of requests for clarification of planning guidance received from subordinate headquarters.
22	Number	Of misunderstood ROE.
23	Number	Of revisions to commander's intent.

ART 7.4.1.3 DEVELOP COURSES OF ACTION

7-37. Design COA for analysis, evaluation, and selection as the one to accomplish the mission most effectively. It includes analyzing relative combat power, generating options, arraying initial forces, developing schemes of maneuver, assigning headquarters, and preparing COA statements and sketches. The commander has the option of directing a specific course of

action because of time available, staff proficiency, or other reasons. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	COAs developed adequately in terms of feasibility, suitability, and acceptability for mission accomplishment if executed.
02	Time	To provide the commander with suitable, feasible, and acceptable COAs after receipt of operation order/warning order.
03	Time	To prepare complete COA statements and sketches.
04	Percent	Of non-selected COAs considered for deception.
05	Percent	Of COAs suitable.
06	Percent	Of COAs feasible.
07	Percent	Of COAs acceptable.
08	Percent	Of COAs distinguishable.
09	Percent	Of COAs presented to commander that were suitable, feasible, acceptable and distinct from one another.
10	Number	Of COAs developed.

ART 7.4.1.4 ANALYZE COURSES OF ACTION

7-38. Develop criteria for success and examine each COA for its advantages and disadvantages with respect to those criteria. This task normally includes the technique of wargaming as described in FM 101-5. Visualize each COA objectively, assess suitability, feasibility, and acceptability of the COA, focus IPB requirements, identify coordination requirements, anticipate critical operational events, and determine conditions and resources required for success. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Identify advantages/disadvantages of COAs and criteria of success for evaluation.
02	Time	To complete COA analysis (wargame).
03	Percent	Completeness of COAs (wargame).
04	Percent	Conformance of analysis (wargame) to doctrine.
05	Percent	Of branches and sequels experienced identified in COAs.
06	Percent	Of capabilities ultimately required identified in COA analysis (wargame).
07	Percent	Of COAs analyzed against potential enemy COAs.
08	Number	Of limitations (ultimately identified during execution) identified during analysis.
09	Number	Of criteria of comparison and success identified during COA analysis (wargame).

ART 7.4.1.5 COMPARE COURSES OF ACTION

7-39. Evaluate COAs against each other and against criteria of success to determine the most effective one for mission accomplishment. Recommend it for selection. This comparison also considers risk, positioning for future operations, flexibility, and subordinate exercise of initiative. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Selected comparison criteria allows for definitive comparison of COAs.
02	Percent	Of comparison criteria eliminated before comparison.
03	Percent	Of comparison criteria eventually used, defined and weighted before comparison began.

ART 7.4.1.6 APPROVE COURSE OF ACTION

7-40. Decide and approve a COA that is most advantageous to mission accomplishment and is within the higher commander's intent. Refine commander's intent and CCIR to support selected COA. Issue any additional guidance to subordinate commanders and staff. Prepare and issue warning order. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Commander evaluates COAs and selects a COA, modifies COA or rejects all presented COAs.
02	Yes/No	Modified COA or new COA generates a new war game to consider products deriving from that COA.
03	Yes/No	Revised commander's intent adequately addresses key tasks for force as whole, wider purpose. It is expressed in four to five sentences or bullets.
04	Yes/No	Commander decides level of risk to accomplish mission and approves control measures.
05	Time	To issue warning orders.

ART 7.4.1.7 PRODUCE ORDER OR PLAN

7-41. Prepare a plan or order to implement the selected COA IAW the commander's decision by turning it into a clear, concise concept of operations, scheme of maneuver, and required support. The plan includes annexes and overlays as necessary to implement the plan. The plan or order accurately conveys information governing actions to be taken and is completed in the correct format. The order or plan includes supporting annexes and overlays. This includes the establishment of graphic control measures, including fire support coordination measures. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Orders or plans will accomplish the mission and commander's intent. They will be completed with sufficient time for the force to complete required preparatory actions before execution, and communicated effectively.
02	Yes/No	Commander's intent refined and adequately addresses key tasks for force as whole, wider purpose, and expressed in four to five sentences.
03	Time	To issue warning orders.
04	Time	Before execution, commander's concept and intent re-issued.
05	Time	To prepare plans and orders (after deciding on mission concept and intent).
06	Time	To obtain approval of plans and orders.
07	Time	To issue plan or order (after approved).

No.	Scale	Measure
08	Percent	Of functional areas covered in operation plan.
09	Percent	Accuracy of information in plans and orders issued and disseminated to subordinate units.
10	Percent	Accuracy of information in operation order/operation plan to meet established objectives.
11	Number	Of instances where the operation plan/operation order conflicts with standards under conduct of war and international convention.

ART 7.4.2 INTEGRATE REQUIREMENTS AND CAPABILITIES

7-42. Combine and coordinate forces' and operating systems' capabilities in the most effective combinations to meet the requirements for mission accomplishment established by planning. (FM 101-5) (USACAC)

No.	Scale	Measure
01	Yes/No	Combinations and timings of forces and operating systems contribute to mission accomplishment.
02	Time	Delay in initiating phase of operation.
03	Time	Prior to execution, force has execution matrix with sequence and timing of each subordinate task throughout operation.
04	Time	To modify plans and actions due to operational contingencies.
05	Percent	Of assigned and supporting forces coordinated to synchronize operation in right place at right time.
06	Number	Of potential cross boundary fratricide incidents identified and eliminated by force headquarters.
07	Number	Of uncoordinated element or activity actions causing disruption or delay of US or allied plans and objectives.

ART 7.4.2.1 FOCUS DECISION MAKING SUPPORT

7-43. Integrate IO and information management activities that enhance situational understanding rapidly and accurately, achieving information superiority and yielding decisions that initiate or govern actions to accomplish tactical missions. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Integration of information operations and information management activities enhances the commander's situational understanding and supports making superior and timelier decisions.
02	Percent	Of identified friendly vulnerabilities exploited by enemy action.
03	Number	Of uncoordinated IO element or activity actions causing disruption or delay of US or allied plans and objectives.
04	Number	Of force plans or objectives being delayed, defeated, or disrupted due to adversary IO actions.
05	Number	Of times that the commander has to request further information for decision making.
06	Number	Of instances where force IO and information management actions delay, defeat, or disrupt adversary plans or objectives.

ART 7.4.2.2 ENHANCE FRIENDLY DECISION MAKING

7-44. Leverage information management that supports making more precise and timely decisions than the enemy. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Time	Before force knows of possible compromise of EEFI.
02	Time	To make effective decisions relative to enemy.
03	Percent	Of decisions made more precisely and before enemy could effectively react.
04	Percent	Adequacy of friendly decisions.
05	Percent	Of EEFI successfully protected during operation.
06	Percent	Of enemy attacks on previously identified EEFI force vulnerability.

ART 7.4.2.3 DEGRADE ENEMY DECISIONS

7-45. To integrate IO that cause the enemy to make inappropriate, untimely, and irrelevant decisions that give friendly forces a decision-making advantage. (FM 3-13) (USACAC)

No.	Scale	Measure
01	Yes/No	Enemy decision making was degraded as a result of friendly information operations sufficient to constitute a friendly decision making advantage.
02	Time	Lost by enemy in making decisions due to lack of information.
03	Time	To identify required tactical IO information necessary for IO planning after onset of planning.
04	Time	To task intelligence community and other tactical support organizations and agencies to fill information requirements for IO planning.
05	Percent	Of enemy information degraded by friendly actions.
06	Percent	Of tactical IO objectives verifiably achieved.
07	Percent	Of identified operational IO information requirements unfilled at time-critical points in the planning process.
08	Percent	Of IO cell nominated targets struck with lethal or nonlethal means during the timeframe planned for in the IO appendix or other planning document.
09	Percent	Of IO cell nominated targets restruck when called for after combat assessment of initial strike.
10	Percent	Of IO objectives executed actually degrading enemy decision making.

ART 7.4.3 DEVELOP COMMANDER'S CRITICAL INFORMATION REQUIREMENTS RECOMMENDATIONS

7-46. Analyze information requirements against a mission and commander's intent. Identify, prepare, and recommend for designation by the commander those information requirements that directly affect decision making and dictate the successful execution of operational or tactical operations. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Answering the developed CCIR provides the commander with the information needed to make decisions.
02	Time	Since last CCIR update.
03	Time	To promulgate CCIR for collection.
04	Time	To look at future CCIR (depends on scale of operation and level of headquarters).
05	Percent	Of answered CCIR.
06	Percent	Of CCIR initiated by commander.
07	Percent	Of CCIR initiated by staff.
08	Percent	Of information (pieces or types) commander needs to make decision listed as CCIR.
09	Number	Of active CCIR.

ART 7.4.4 ESTABLISH TARGET PRIORITIES

7-47. Identify, and recommend for selection, targets by categories in precedence to mission accomplishment, or individual targets for attack by, any and all BOS during the operation. (FM 6-20) (USACAC)

No.	Scale	Measure
01	Yes/No	Target priorities support the accomplishment of the mission.
02	Time	To establish target priorities.
03	Percent	Of targets attacked in priority prescribed.
04	Percent	Of required priority targets correctly identified.
05	Percent	Of unknown targets that would have been priority if correctly identified.

ART 7.4.5 PROVIDE OPERATIONAL LAW SUPPORT

7-48. Support the command and control of military operations (the MDMP and conduct of operations) by performing mission analysis, preparing legal estimates, designing the operational legal support structure, writing legal annexes, assisting in the development and training of ROE, reviewing all operational plans and orders, maintaining situational understanding, and advising on the legal aspects of targeting, application of the ROE, civil-military operations, and IO. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Operational law support enhances the chances of accomplishing the mission without violating the laws of war or rules of engagement.
02	Time	To assist drafting and reviewing of the ROE for the operation.
03	Time	Between commander's requests for and receipt of legal advice or support.
04	Time	To prepare legal estimates.
05	Time	To draft legal annexes.
06	Time	Between requests for briefings on ROE/law of war and actual presentation of the briefings.
07	Time	To review existing international and interagency agreements.

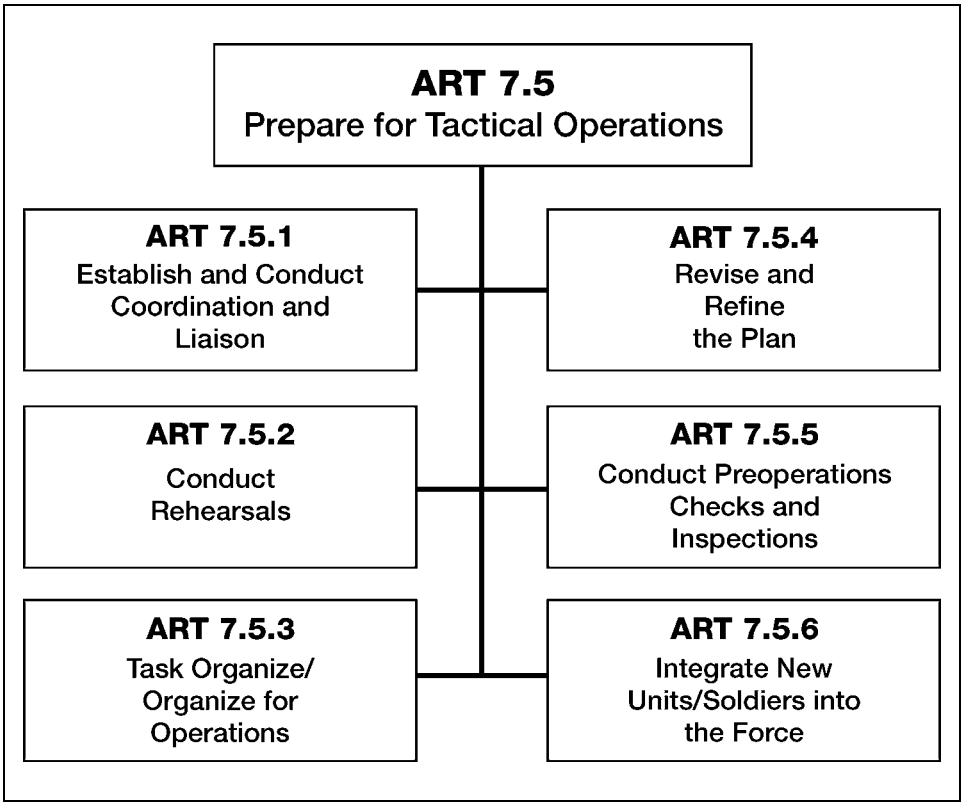
No.	Scale	Measure
08	Time	To review operation plans.
09	Percent	Unit personnel who receive ROE briefings prior to deployment.
10	Percent	Operational law judge advocates and support personnel with working knowledge of available Army information systems.
11	Percent	Operational law judge advocates and support personnel with access to Army information systems.
12	Percent	Operational law judge advocates and support personnel with access to LAAWS.
13	Percent	Judge advocates who deploy with radio data link and radio.
14	Percent	Judge advocates with access to a global positioning device.
15	Percent	Judge advocates proficiently trained to use a global positioning device.
16	Percent	Units/soldiers that receive legal briefings on ROE/law of war, status of forces agreements, and host-nation law prior to deployment.
17	Percent	Operational cells with a judge advocate detailed.
18	Percent	Missions where a judge advocate participates in mission analysis.
19	Percent	Targets reviewed by a judge advocate.
20	Percent	Entities requiring legal liaison that have a designated judge advocate liaison.
21	Percent	Crisis management team meetings attended by a judge advocate.
22	Percent	Issues correctly identified, analyzed, and resolved to support the C2 mission.
23	Percent	Legal opinions that reflect an accurate view of the law.
24	Percent	Legal opinions that answer the client's questions clearly and concisely.
25	Percent	Legal opinions in a form that is useful to the client.
26	Percent	Of opinions reviewed by a supervisor before release.

ART 7.4.6 PROVIDE SPACE SUPPORT

7-49. Coordinate and combine space-based capabilities and products (national, military, and commercial) to support the command and control of tactical operations (the MDMP and conduct of operations) in a manner that most effectively meets the requirements established for mission accomplishment. Determine essential, specified and implied tasks from a space perspective in mission analysis; develop space input to IPB; provide space support options, space-based products that support scheme of maneuver development, and space-based products that support COA statements in COA development; develop space staff estimate; coordinate space-based input to event templates, synchronization matrix and decision support template, communications and CSS estimates. (FM 100-18) (USASMDC)

No.	Scale	Measure
01	Yes/No	Space support enhances the unit's ability to accomplish the mission.
02	Yes/No	Coordinate with the unit operations officer for space input to warning order.

No.	Scale	Measure
03	Yes/No	Provide space input to mission analysis.
04	Yes/No	Provide initial space input to IPB.
05	Yes/No	Determine space support requirements.
06	Yes/No	Coordinate with the unit intelligence officer to identify available space reconnaissance assets.
07	Yes/No	Identify space support that can assist the staff elements.
08	Yes/No	Provide space input to unit COA development process.
09	Yes/No	Develop space staff estimate.
10	Yes/No	Finalize space input to the warning order and operation order.
11	Yes/No	Coordinate with staff elements to ensure space-related activities are included in their portions of the operation order.
12	Yes/No	Participate as a member of special boards as necessary.



SECTION V – ART 7.5: PREPARE FOR TACTICAL OPERATIONS

7-50. To initiate and conduct activities by the unit prior to execution to improve its ability to conduct the operation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Preparatory activities raise the unit's ability to accomplish its mission.
02	Time	For subordinate forces to complete required preparations.
03	Time	For force to complete required staff, unit, and individual preparations.

No.	Scale	Measure
04	Time	Available for preparation before execution.
05	Percent	Of required preparations completed by execution time.
06	Percent	Of completed preparations that improved force capability to execute mission.

ART 7.5.1 ESTABLISH AND CONDUCT COORDINATION AND LIAISON

7-51. Exchange information to inform, integrate, and deconflict actions by forces and BOS during operations to reduce duplication, confusion, and problems. Liaison, included in coordination, involves maintaining physical contact and communication between elements of military forces to ensure mutual understanding and unity of purpose and action. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Coordination of plans and synchronization of actions between organizations contributes to mission accomplishment.
02	Time	Until liaison structure established (from alert order).
03	Time	For liaison officers (LNOs) to communicate new orders or information to allies and friendly elements of force.
04	Time	Since LNOs attached to force headquarters last received situation update from own unit.
05	Time	For force headquarters LNOs to contact force headquarters on behalf of unit to which sent.
06	Time	For force staff sections to contact LNO attached to force headquarters.
07	Time	For parent unit to contact their LNO.
08	Percent	Of adjacent units or agencies with liaison to force.
09	Percent	Of liaison personnel with required security clearances and identification credentials.
10	Percent	Of unit or agency information missing or late.
11	Number	Of instances when friendly forces orders/taskings were significantly delayed.

ART 7.5.2 CONDUCT REHEARSALS

7-52. Practice an action or operation prior to actual performance of that action. Rehearsals allow participants to become familiar with and translate the tactical plan into a visual impression that orients them to both their environment and other units during execution of the operation. They also imprint a mental picture of the sequence of key actions within the operation and provide a forum for subordinate leaders and units to coordinate. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Rehearsal improves all participants' familiarity with the tactical plan, their roles within that plan, and coordination.
02	Yes/No	Specify type of rehearsal.

No.	Scale	Measure
03	Yes/No	Specify technique of rehearsal.
04	Yes/No	Specify roles and responsibilities of participants.
05	Yes/No	Identify and prioritize events to be rehearsed.
06	Yes/No	Subordinates review their mission, commander's intent, and concept of operations in relationship to time (such as by timelines or phases).
07	Yes/No	Discuss and resolve BOS coordination issues.
08	Yes/No	Major changes are made to the existing plan.
09	Time	To document and distribute results of the rehearsal.
10	Percent	Of the operation's phases/objectives are rehearsed.
11	Percent	Of developed branch (or contingency) plans reviewed.

ART 7.5.3 TASK ORGANIZE/ORGANIZE FOR OPERATIONS

7-53. Transfer available resources and establish command and support relationships according to the plan or order to carry out the operation. Organizing for operations includes moving the unit's location as required, exchanging SOPs, establishing communications and liaison, and conducting briefings and rehearsals. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Units conducting operations properly transfer necessary resources IAW established command and support relationships to accomplish their mission.
02	Time	For force to transition to or from tactical battle formation.
03	Time	From planned execution time force transitions to or from tactical battle formation.
04	Time	To move forces into locations to facilitate tactical commanders' plans for implementing subordinate plan.
05	Time	To complete force movement to new assembly areas (from which to maneuver).
06	Time	To assign subordinate forces to new tactical formations.
07	Time	Until subordinate units are prepared to send and receive data and do parallel planning with new headquarters.
08	Percent	Of force moved into position to facilitate tactical commander's plans.
09	Percent	Of required logistics in place on-schedule.
10	Percent	Of allocated forces in place at operation execution.
11	Percent	Of required logistics stockpiled/positioned (prior to operation D-day, H-hour).
12	Percent	Of designated forces massed in designated assembly area according to planned times.
13	Percent	Units closed on new assembly areas before execution.
14	Percent	Of force postured physically to execute plan's tactical maneuver.

ART 7.5.4 REVISE AND REFINE THE PLAN

7-54. Adjust the plan based upon updated relevant information or further analysis of the plan, if necessary. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Revision and refinements of plan contribute to accomplishing the mission.
02	Yes/No	Plan is revised and refined after receipt of updated relevant information, such as answered CCIR.
03	Time	To adjust plan after receipt of updated relevant information.
04	Time	To revise original plan after recognizing planning assumptions invalid or information updated.
05	Percent	Of plan adjusted with each adjustment.
06	Percent	Accuracy of adjustments by execution.

ART 7.5.5 CONDUCT PREOPERATIONS CHECKS AND INSPECTIONS

7-55. Inspect and check unit and individual preparations for operations to ensure units, soldiers, and systems are fully capable and ready to execute the mission. (FM 6-0) (USACAC)

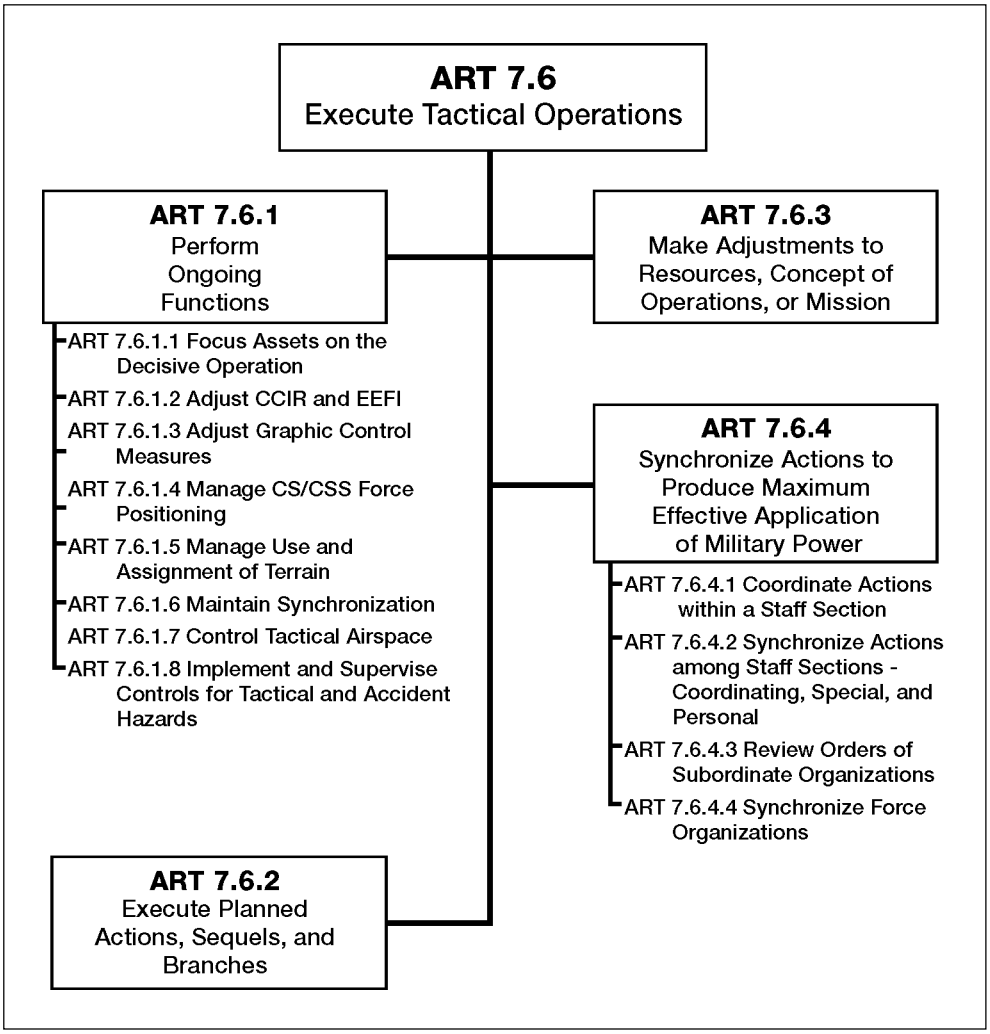
No.	Scale	Measure
01	Yes/No	The inspections and corrections of deficiencies found of unit, soldiers, and systems improve their capability and readiness to execute the mission.
02	Time	To conduct checks and inspections.
03	Time	To correct deficiencies found during inspection.
04	Percent	Of units, individuals, and materiel not ready for operation.
05	Percent	Of deficiencies corrected before operation.

ART 7.5.6 INTEGRATE NEW UNITS/SOLDIERS INTO THE FORCE

7-56. Assimilate new units and soldiers into the force in a posture that allows them to contribute effectively to mission accomplishment during an operation. This includes receiving and introducing them to the force and the environment, orienting them on their place and role in the force and the operation, establishing C2, sustainment, and communications within the force, and training them in the unit SOP and METL for the operation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Integration of new units and soldiers made them contribute more effectively to mission accomplishment.
02	Time	To receive individuals into new organizations.
03	Time	To introduce individuals to the environment and the operation.
04	Time	To receive new organizations into the force.
05	Time	To introduce new organizations to the environment and the operation.
06	Time	To train new organizations and individuals for the operation.

No.	Scale	Measure
07	Percent	Of individuals successfully integrated into new organizations.
08	Percent	Of organizations successfully integrated into force.
09	Percent	Of new soldiers within the unit who must be assimilated.
10	Number	Of new soldiers within the unit who must be assimilated.



SECTION VI – ART 7.6: EXECUTE TACTICAL OPERATIONS

7-57. Put a plan into action by applying military power against an adversary to accomplish the mission. Use situational understanding to assess progress and make execution and adjustment decisions. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Mission accomplished in accordance with higher commander's intent.
02	Yes/No	Mission accomplished in accordance with specified timeline.
03	Yes/No	Mission accomplishment does not detract from unit's capability of continuing or being assigned future missions and operations.

No.	Scale	Measure
04	Yes/No	Mission accomplished without excessive expenditure of resources.
05	Time	To accomplish mission.
06	Percent	Of enemy actions successfully countered.
07	Number	Of opportunities for success exploited.
08	Ratio	Of friendly versus enemy casualties (soldiers/weapons systems) to accomplish mission.

ART 7.6.1 PERFORM ONGOING FUNCTIONS

7-58. Accomplish routine tasks during execution essential to satisfactory mission accomplishment. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Perform routine management tasks as necessary to accomplish the mission without the need to take extraordinary efforts to ensure their correct performance.
02	Percent	Of all functions performed adequately during operations.
03	Percent	Of individual functions performed adequately during operations.
04	Number	Of friendly missions affected by failure to perform one or more functions.

ART 7.6.1.1 FOCUS ASSETS ON DECISIVE OPERATION

7-59. Continuously survey all assets and ensure that they are in position and tasked to support the decisive operation or main effort for a phase of an operation, or that they are moving to a position where they can provide that support. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit allocation of combat power regularly supports the decisive operation necessary to accomplish the mission.
02	Percent	Of combat power assets directed to decisive operation.
03	Number	Of incidents of excessive combat power used to execute shaping operations.
04	Number	Of incidents of combat power resources improperly positioned to support decisive operation.

ART 7.6.1.2 ADJUST CCIR AND EEFI

7-60. Continuously update CCIR and EEFI during operations with routine review by the commander and staff. Analyze IR against changing operational circumstances and designate IR that affect decision making and the success of the mission and decisive operation. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Continuously adjust CCIR and EEFI during operations with review by commander and staff.
02	Time	Lag between changing information and update of CCIR and EEFI.
03	Number	Of CCIR and EEFI requirements not updated or changed.

ART 7.6.1.3 ADJUST GRAPHIC CONTROL MEASURES

7-61. Change graphic control measures, including fire support coordination measures, any time there is significant movement of forces or special operations force activity in the AO. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Adjustment of graphic control measures reflects changes in the factors of METT-TC and is timely and effective.
02	Time	Lag between operations and update of graphic control measures.
03	Percent	Of graphic control measures requiring amendment to facilitate operations.
04	Number	Of graphic control measures not updated.
05	Number	Of significant movement of forces compared to the number and timeliness of graphic changes.

ART 7.6.1.4 MANAGE CS/CSS FORCE POSITIONING

7-62. Move or cause CS and CSS forces to be moved and positioned where they can contribute the maximum support to the operation. Determine where the CS and CSS forces are and where they must be to continuously provide effective support. Ensure that movement is planned and executed in time to position them there. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Reposition CS/CSS units and activities as necessary to respond to tactical operations without negative effects on friendly operations.
02	Time	To effect essential CS/CSS repositioning without negative effects on friendly operations.
03	Time	Lag between identification of need for repositioning and commencement of repositioning.
04	Percent	To which friendly operations affected by failures in CS/CSS positioning.
05	Number	Of friendly operations adversely affected by failure in positioning.

ART 7.6.1.5 MANAGE USE AND ASSIGNMENT OF TERRAIN

7-63. Ensure that adequate space, including the use of routes, is available at the right time to support critical activities, especially the decisive operation within the AO. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Adequate maneuver space and routes support the decisive operation.
02	Time	Since last check of terrain management status.
03	Number	Of friendly units' operations affected by lack of terrain management.
04	Number	Of incidents where friendly units dispute assignment of terrain or routes.

ART 7.6.1.6 MAINTAIN SYNCHRONIZATION

7-64. Take actions to preserve the arrangement of military actions in time, space, and purpose to produce maximum relative military power at a decisive place and time. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Combat power available at the decisive place and time to accomplish the mission.
02	Percent	Of assigned and supporting forces execute operation on time (right people, right place, right time).
03	Percent	Of force or subordinate missions and support carried out as planned.
04	Percent	Of friendly forces actively contributing to conduct of operation.
05	Percent	Of support requirements met at time and as required.
06	Percent	Of policies and procedures for establishment and coordination of logistics, maintenance, transportation, and other support completed.
07	Number	Of missions (for example, special operations force, psychological operation, military deception) executed without coordinating with other forces in target area.

ART 7.6.1.7 CONTROL TACTICAL AIRSPACE

7-65. Maximize the combat effectiveness of all tactical airspace users in support of the operation. Prevent fratricide, enhance air defense operations, and permit greater flexibility of tactical operations. Prepare and implement the tactical airspace control plan and associated airspace control measures. (FM 3-52) (USACAC)

No.	Scale	Measure
01	Yes/No	The control of tactical airspace allows airspace users to support tactical operations while preventing fratricide.
02	Yes/No	The control of tactical airspace enhances the conduct of air operations.
03	Yes/No	The control of tactical airspace enhances the conduct of air defense operations.
04	Time	To confirm identity of unidentified friendly target.
05	Time	Since last publication of air control orders.
06	Percent	Of friendly aircraft destroyed by friendly air defense.
07	Percent	Of friendly aircraft destroyed by friendly fire.
08	Percent	Of positive identification false negatives (friendly identified as enemy).
09	Percent	Of positive identification false positives (enemy identified as friendly).
10	Percent	Of fixed wing sorties receive clearances needed to complete mission.
11	Percent	Of rotary wing sorties receive clearances needed to complete mission.
12	Percent	Of air defense operations did not interfere with other operations.
13	Number	Of attacks by enemy air forces and the time that they occur.
14	Number	Of air-to-air mishaps in the AO.

ART 7.6.1.8 IMPLEMENT AND SUPERVISE CONTROLS FOR TACTICAL AND ACCIDENT HAZARDS

7-66. Establish, communicate, and enforce controls that reduce the risk of tactical and accident hazards. (FM 100-14) (USASC)

No.	Scale	Measure
01	Yes/No	Establish, communicate and enforce tactical and accident hazard controls.
02	Time	To communicate controls or changes to force.
03	Percent	Of force affected by identified accident hazards.
04	Percent	Of force affected by unidentified accident hazards.
05	Number	Of controls averting identified accident hazards.
06	Number	Of controls averting unidentified accident hazards.

ART 7.6.2 EXECUTE PLANNED ACTIONS, SEQUELS, AND BRANCHES

7-67. Implement actions anticipated by and outlined in the plan of operations based upon evaluation of progress as within the criteria of success in the plan. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Execute planned actions, sequels, and branches based upon the evaluation of progress.
02	Time	To refine planned branch or sequel for use by force.
03	Percent	Of planned branches and sequels meeting requirements of current operation.

ART 7.6.3 MAKE ADJUSTMENTS TO RESOURCES, CONCEPT OF OPERATIONS, OR MISSION

7-68. Take actions to modify the operation (or major activities) to exploit opportunities or resolve progress problems as a result of evaluation of the progress of the operation against the criteria of success. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Adjust unit plan to exploit opportunities or resolve problems occurring during execution.
02	Time	To adjust original plan after assessing progress and recognizing threat or opportunity.
03	Number	Of adjustments effective in seizing opportunity or countering threat.

ART 7.6.4 SYNCHRONIZE ACTIONS TO PRODUCE MAXIMUM EFFECTIVE APPLICATION OF MILITARY POWER

7-69. Arrange military actions by forces and BOS in time, space, and purpose to produce maximum relative military power at a decisive place and time. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Synchronize unit actions to accomplish the mission.
02	Time	To resynchronize BOS after execution or adjustment decision.
03	Percent	Of required resynchronization accomplished in time available.

No.	Scale	Measure
04	Percent	Of assigned and supporting forces coordinated to synchronize operation in right place at right time.
05	Number	Of friendly actions.
06	Number	Of uncoordinated element or activity actions causing disruption or delay of US or allied plans and objectives.

ART 7.6.4.1 COORDINATE ACTIONS WITHIN A STAFF SECTION

7-70. Exchange information and arrange actions to inform, integrate, and deconflict actions within a staff section during operations to reduce duplication, confusion, and problems. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Deconflict actions within a staff section.
02	Time	Spent in coordinating within staff section.
03	Percent	Of actions coordinated within staff section before disseminating further.
04	Incidents	Of actions uncoordinated within staff section causing disruption or delay of operation.
05	Incidents	Of actions uncoordinated within staff section affecting others' actions.

ART 7.6.4.2 SYNCHRONIZE ACTIONS AMONG STAFF SECTIONS (COORDINATING, SPECIAL, AND PERSONAL)

7-71. Coordinate actions among staff sections in arranging military actions in time, space, and purpose by BOS to produce the maximum relative military power at a decisive place and time. This includes informing of, integrating, and deconflicting actions undertaken by or directed by staff sections during operations to reduce duplication, confusion, and problems among the staff sections. (FM 6-0) (USACAC)

Note: ART 7.6.4.2 includes the targeting process outlined in JP 3-60 and FM 6-20-10.

No.	Scale	Measure
01	Yes/No	Staff section cooperates in arranging military actions in time, space, and purpose.
02	Time	Spent in coordinating among staff sections.
03	Percent	Of actions coordinated among staff sections before disseminating further.
04	Number	Of uncoordinated actions between staff sections causing disruption or delay of unit operations.
05	Number	Of actions uncoordinated among staff section affecting others' actions.

ART 7.6.4.3 REVIEW ORDERS OF SUBORDINATE ORGANIZATIONS

7-72. Ensure that all relevant information and factors issued in subordinate orders contribute to vertical BOS synchronization. ART 7.6.4.3 informs the staff about whom they will have to coordinate. It reveals potential conflicts and problems among subordinate forces, higher headquarters, adjacent, and

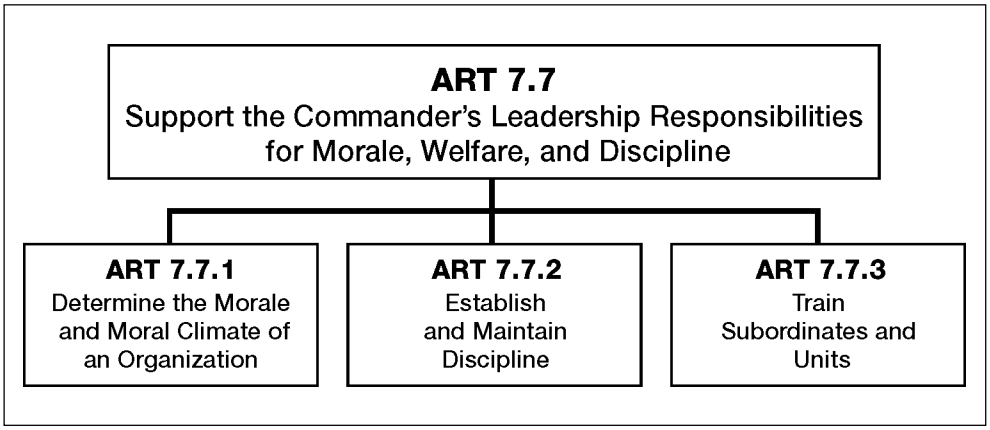
other units that might affect or be affected by the subordinate plan and the headquarters' plan. It resolves conflicts and problems among forces and BOS before they affect preparations or operations, or resolves the damage. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Resolve conflicts and problems between subordinates before they affect preparations or operations.
02	Percent	Of subordinate organization orders reviewed.
03	Number	Of discrepancies between subordinates organizations' orders and force order that could have affected operation.
04	Number	Of discrepancies between subordinates organizations' orders and force order that negatively affected operation.

ART 7.6.4.4 SYNCHRONIZE FORCE OPERATIONS

7-73. Arrange military actions by subordinate forces and the force as a whole in time, space, and purpose to produce maximum relative military power at a decisive place and time. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Synchronize force operations to allow the unit to accomplish the mission.
02	Percent	Of assigned and supporting forces participating in operation in right place at right time.
03	Number	Of uncoordinated element or activity actions causing disruption or delay of operation.



SECTION VII – ART 7.7: SUPPORT THE COMMANDER'S LEADERSHIP RESPONSIBILITIES FOR MORALE, WELFARE, AND DISCIPLINE

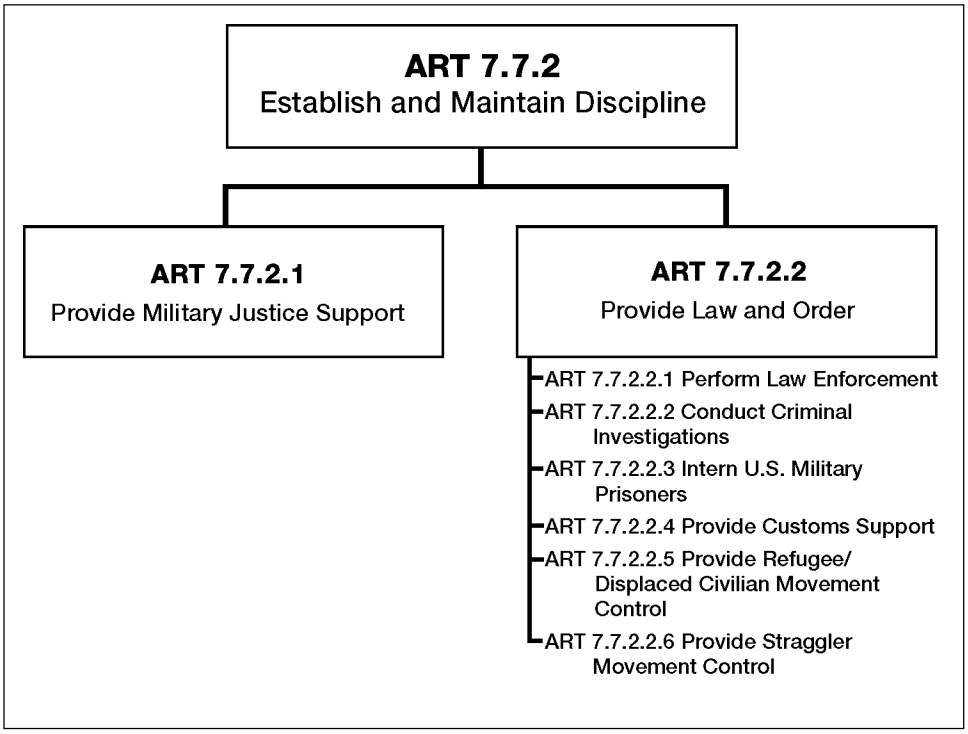
7-74. Support the commander's leadership influencing, operating, and improving activities that fulfill his responsibilities for the morale, welfare, and discipline of the soldiers and Department of the Army civilians in his command. (FM 22-100) (USACAC)

No.	Scale	Measure
01	Yes/No	Commander fulfills his responsibilities for the morale, welfare, and discipline of his soldiers and civilians.
02	Yes/No	Units mission is degraded, delayed, or disrupted due to stress-related illness or injury.
03	Percent	Of disciplinary cases throughout command.
04	Number	Of unit and personal commendations for achievement and bravery.
05	Number	Of incidents of disrespect to authorities or unit.
06	Percent	Of leaders trained or educated appropriate to rank.

ART 7.7.1 DETERMINE MORALE AND MORAL CLIMATE OF ORGANIZATION

7-75. Morale, the human dimension's most important intangible element, is an emotional bond that impacts the quality of organizational cohesion in the accomplishment of missions. Moral climate deals with the ability of a unit to do what is right even when there is pressure to do something else. (FM 22-100) (USACAC)

No.	Scale	Measure
01	Yes/No	The morale of the soldiers and civilians and moral climate of organization accurately and regularly determined.
02	Percent	Of crimes reported involving military behavior in violation of statutes of the Uniform Code of Military Justice (UCMJ).
03	Number	Of reports from chaplain ministry team on level of morale.
04	Number	Of morale incidents reported through medical channels.



ART 7.7.2 ESTABLISH AND MAINTAIN DISCIPLINE

7-76. Establish and maintain discipline through military law enforcement, OPM regulations, justice, and confinement activities that regulate the force to comply with command policies and directives, ensure a lawful and orderly environment, and suppress criminal behavior. Conduct the programs in such manner as to promote self-discipline and respect for authority. Internalize and practice Army values with minimum coercion. (FM 22-100) (USACAC)

No.	*Scale*	*Measure*
01	Yes/No	Soldiers and Department of the Army civilians exhibit respect for authority and internalize and practice Army values. Organization has lawful and orderly environment.
02	Percent	Of law enforcement personnel committed to disciplinary matters versus combat support.
03	Number	Of reported disciplinary events.
04	Number	Of incidents involving off-duty US military personnel that involve alcohol or drugs within a given time.
05	Number	Of accidents involving military vehicles within a given time.
06	Number	Of crimes reported within a given time.
07	Number	Of law and order incidents not covered by existing policy/SOP.

ART 7.7.2.1 PROVIDE MILITARY JUSTICE SUPPORT

7-77. Advise and assist the commander in the administration of the UCMJ, to include the disposition of alleged offenses by courts-martial or nonjudicial punishment, appeals of nonjudicial punishment, and action on courts-martial

findings and sentences. Supervise the administration and prosecution of courts-martial, preparation of records of trial, the victim-witness assistance program, and military justice training for all Army personnel. (FM 27-100) (TJAGSA)

No.	Scale	Measure
01	Yes/No	Military justice administration supports the commander's leadership and discipline responsibilities.
02	Time	To prepare an Article 15, UCMJ, DA Form 2627.
03	Time	To prepare a record of trial by court-martial.
04	Time	To conduct Article 32 proceedings.
05	Time	Between requests for military justice briefings and actual presentations.
06	Time	Between preferral to referral of a case.
07	Time	Between referral to trial of a case.
08	Percent	Of felony cases cleared within first month.
09	Percent	Of cases in which unlawful command influence occurs.
10	Percent	Of cases in which the commander recommended or directed the appropriate level of court-martial.
11	Percent	Of cases overturned on appeal.
12	Percent	Of cases requiring the detail of outside counsel.
13	Percent	Of victims and witnesses having an appointed victim-witness liaison.
14	Percent	Of victims and witnesses who receive a victim-witness information packet.
15	Percent	Of unit personnel who receive military justice training.
16	Percent	Of soldiers who understand General Order #1 prior to deployment.
17	Percent	Of drafted specifications that properly state an offense.
18	Percent	Of drafted specifications that are supported by probable cause.
19	Percent	Of court-martial cases co-chaired by a senior judge advocate.

ART 7.7.2.2 PROVIDE LAW AND ORDER

7-78. Ensure lawful and orderly environment and suppress criminal behavior. (FM 19-10) (USAMPS)

No.	Scale	Measure
01	Yes/No	Suppress criminal behavior within the unit AO.
02	Yes/No	Coordinate with the appropriate US and host nation authorities for law and order operational support.
03	Yes/No	Coordinate actions to remove conditions promoting crime.
04	Yes/No	Provide guidance on rules of engagement and rules of interaction.
05	Yes/No	Perform physical security measures to include vulnerability assessments on designated critical assets and special ammunition.
06	Yes/No	Develop plans and SOP concerning law enforcement operations.
07	Yes/No	Conduct installation vulnerability assessments.

No.	Scale	Measure
08	Percent	Of time military police subordinate elements conduct law and order missions.
09	Percent	Of criminal behavior suppressed in the AO.
10	Percent	Of military police assets distributed to conduct law and order operations in accordance with the plan.
11	Number	Of serious crimes, such as crimes against the United States, political crimes, and war crimes referred to the US Army Criminal Investigation Command (USACIDC) for investigation within a given time.
12	Number	Of vulnerability assessments conducted for designated critical assets and special ammunition within the AO.
13	Number	Of crimes reported within a given time.
14	Number	Of law and order incidents not covered by existing/established policy/SOP.

ART 7.7.2.2.1 Perform Law Enforcement

7-79. Assist commanders as they maintain the efficiency of their combat commands through conducting law enforcement operations. ART 7.7.2.2.1 includes the maintenance of liaison activities and support of the training of other DOD police organizations, host-nation police authorities, and multinational police agencies. Other activities conducted at the direction of the commander or in the absence of host-nation agreements may include investigations, crime prevention measures, selective enforcement measures, and courtesy patrols. ART 7.7.2.2.1 includes the conduct of drug suppression programs, and law enforcement raids. (FM 19-10) (USAMPS)

No.	Scale	Measure
01	Yes/No	The conduct of law enforcement operations helps the commander maintain the efficiency of his command.
02	Yes/No	Brief and monitor military police sections.
03	Percent	Of crimes/incidents resolved within 30 days.
04	Percent	Of actions conducted in compliance with SOP and appropriate regulations.
05	Percent	Of requests for rail and road movement escorts met.
06	Percent	Of security force requirement available to meet operational needs.
07	Number	Of serious crimes, such as crimes against the United States, political crimes, and war crimes, referred to the USACIDC for investigation.

ART 7.7.2.2.2 Conduct Criminal Investigations

7-80. Investigate offenses against US forces or property committed by persons subject to military law. This includes minor crimes and major incidents involving death, serious bodily injury, and war crimes. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	Investigate and refer offenses against US forces or property committed by persons subject to military law.
02	Yes/No	Monitor all ongoing investigations in the theater of operation and receive final reports from subordinate elements.

No.	Scale	Measure
03	Yes/No	Coordinate with USACIDC for investigation of all major incidents (deaths, serious bodily injury, and war crimes).
04	Yes/No	Law enforcement agency personnel take control of crime scene.
05	Yes/No	Law enforcement agency personnel identify personnel involved in the crime.
06	Yes/No	Senior law enforcement agency individual formulates investigative plan.
07	Yes/No	Law enforcement agency personnel process crime scene by recording investigative notes and sketches, photographing crime scene as necessary, and collecting physical evidence for evaluation.
08	Yes/No	Law enforcement agency personnel release crime scene to appropriate individual.
09	Yes/No	Law enforcement agency personnel pursue immediate leads by interviewing victim and witnesses, obtaining written statements (if appropriate), advising suspects of legal rights, obtaining written statements from suspects, collecting related documents necessary to support specific investigations, and coordinating with the judge advocate office as necessary.
10	Yes/No	Standard interview techniques modified to overcome any language barriers and cultural differences.
11	Yes/No	Investigators maintain a disciplined and systematic approach in their questioning when doing a long series of interviews on the same basic topic.
12	Yes/No	Law enforcement agency personnel continue investigation as necessary, to include completing evidence documentation, releasing evidence to evidence custodian, identifying need for crime lab analysis of evidence, obtaining other needed specialized investigative support (polygraph or technical listening equipment), gathering related criminal intelligence from other sources, conducting surveillance, submitting status reports, and coordinating investigative efforts and findings with supporting staff judge advocate office.
13	Yes/No	Law enforcement agency personnel close case by preparing final report.
14	Time	To conduct crime analysis.
15	Percent	Of investigations of minor reported incidents.
16	Percent	Of investigations conducted and reported IAW CID Regulation 195-1, AR 195-2, and FM 3-19.20.
17	Percent	Of returns on deficient reports of investigations for corrective action or for further investigative activity.
18	Percent	Of crime analysis performed correctly.
19	Percent	Of case documents and required report prepared in accordance with legal, regulatory, and SOP guidance.
20	Number	Of hotline complaints referred to CID/MPI.

ART 7.7.2.2.3 Intern US Military Prisoners

7-81. Detain, sustain, protect, and evacuate US military prisoners. ART 7.7.2.2.3 includes the establishment of temporary detention facilities. It also includes the operation of long-term confinement facilities. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	Detain, sustain and protect US military until their trials are completed and their sentences served.
02	Yes/No	Retain US military prisoners in custody until trial or until transferred to a field confinement facility.
03	Yes/No	Evacuate convicted prisoners from the AO IAW policy/law.
04	Yes/No	Evaluate the operation to include identifying the location of temporary detention facilities for US military prisoners.
05	Yes/No	Maintain a confinement facility only if distance or lack of transportation demands it.
06	Yes/No	Evacuate US military prisoners from the forward battle area confinement facility to the rear confinement facility as conditions warrant.
07	Yes/No	Establish a field detention facility within the AO.
08	Yes/No	The staff of the confinement facility protects and sustains US military prisoners.
09	Yes/No	The confinement facility staff prevents the disruption of facility operations by enemy attack.
10	Percent	Of US military prisoners detained or evacuated from AO.
11	Percent	Of cases where confinement facility medical section provided immediate problem solving and crisis intervention to US military prisoners interned at the facility.
12	Percent	Of prisoner movements/transfers following specified routes.
13	Percent	Of US military prisoners picked up and transported with proper written authorization.
14	Percent	Of US military prisoners sent to higher headquarter confinement facilities within 72 hours of arrival.
15	Percent	Of those US military prisoners requiring special billeting and accountability provided health and welfare items while still retaining proper custody and control.
16	Number	Of US military prisoners escaping from confinement facilities within the AO.

ART 7.7.2.2.4 Provide Customs Support

7-82. Perform tactical actions that enforce restrictions on controlled substances and other contraband violations that enter/exit an AO. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	Prevent controlled substances and other contraband items prohibited by law, regulation, or command policy from entering or exiting an AO subject to customs restrictions, policies, and/or laws.
02	Yes/No	Unit given military customs pre-clearance.

No.	Scale	Measure
03	Time	To report custom inspection results to the US border entry point and to the military customs staff advisor.
04	Time	To conduct desired level of customs inspections.
05	Percent	Of redeploying unit personnel and equipment examined or inspected.
06	Percent	Of restricted items identified for US Customs Service or US Department of Agriculture review.
07	Percent	Of key customs concerns for the AO identified.
08	Percent	Of violations of border crossing laws and regulations reported to supported commander and appropriate law enforcement agencies.
09	Percent	Of shipments identified for inspection for the presence of US Customs Service and US Department of Agriculture restricted items.
10	Number	Of prohibited items barred from shipment within a given time.

ART 7.7.2.2.5 Provide Refugee/Displaced Civilian Movement Control

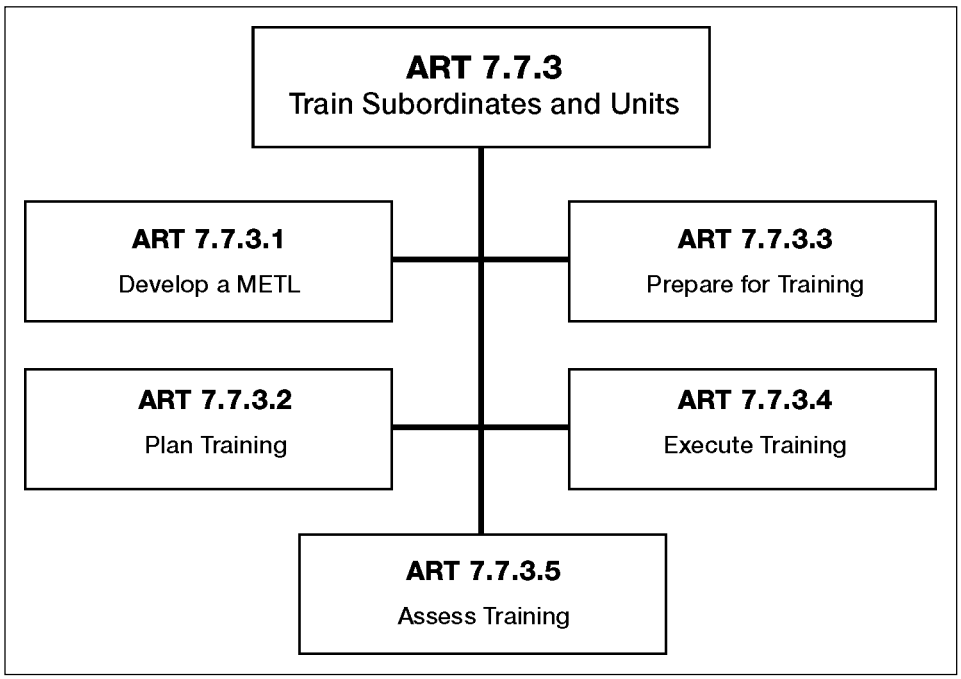
7-83. Assist, direct, or deny the movement of civilians whose location, direction of movement, or actions may hinder operations. US military forces do not assume control of refugee/displaced civilian movement unless requested to do so by the host nation or unless operating in an environment with a hostile government. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	Refugees/displaced civilians do not interfere with the conduct of unit operations.
02	Yes/No	Develop plans to handle the movement of refugees and displaced civilians within the AO.
03	Yes/No	Update higher headquarters on the progress of the operation.
04	Yes/No	Treat dislocated civilians IAW the Geneva Convention and agreements between the United States and host nations.
05	Percent	Of subordinate elements assisting civil affairs, psychological operation and host nation agencies in conducting populace and resources control operations.
06	Number	Of identified populace resources that must be denied contact with the enemy.
07	Number	Of dislocated civilians diverted from routes and areas when they might interfere with US and/or allied military operations.
08	Number	And location of refugee/displaced civilian collection points and assembly areas.

ART 7.7.2.2.6 Provide Straggler Movement Control

7-84. Straggler control involves the direction of uninjured stragglers to their parent unit or to a replacement unit as command policies dictate. Most stragglers are military personnel who have become separated from their command by events on the battlefield. If stragglers are ill, wounded, or in shock, they are moved to the nearest medical facility. (FM 3-19.1) (USAMPS)

No.	Scale	Measure
01	Yes/No	Return stragglers to military/unit control or provide medical assistance as soon as possible.
02	Yes/No	Locate straggler control posts and collecting points on likely routes of straggler flow.
03	Yes/No	Confiscate and dispose of equipment, property, and documents on stragglers IAW the straggler control plan.
04	Yes/No	Divert stragglers from main supply routes (MSRs) onto alternate routes or collecting points to alleviate congestion of the MSRs.
05	Percent	Of unit becomes stragglers.
06	Number	Of deliberate stragglers escorted back to their unit.
07	Number	Of instances in which deliberate stragglers are detained until they can be transported to a set location as designated by the straggler control plan.
08	Number	Of stragglers assisted, detained, or apprehended when they become separated from their units without authority.
09	Number	Of stragglers returned to military/unit control or provided medical assistance as soon as possible.
10	Number	Of stragglers diverted from MSRs onto alternate routes or collecting points to alleviate congestion of the MSRs.



ART 7.7.3 TRAIN SUBORDINATES AND UNITS

7-85. Instruct military personnel to individually and collectively improve their capacity to perform specific military functions and tasks. Training prepares soldiers, leaders, and units to conduct tactical operations and win. (FM 7-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Training prepares soldiers, leaders, and units to accomplish their assigned actions and missions.
02	Time	For unit and personnel to accomplish training to standard.
03	Percent	Of units able to perform assigned missions.
04	Percent	Of personnel able to perform assigned duties in assigned missions.
05	Percent	Of METL tasks trained to standard under prescribed conditions.
06	Percent	Of METL tasks performed to standard in operations.

ART 7.7.3.1 DEVELOP MISSION ESSENTIAL TASK LIST

7-86. Compile collective mission essential tasks that must be successfully performed if an organization is to accomplish its operational missions. (FM 7-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit develops a METL that reflects the higher command METL and guidance.
02	Percent	Of METL tasks selected corresponding to assigned missions.
03	Percent	Increase in effectiveness of unit and individuals on METL tasks relative to before training.
04	Number	Of missions that a unit receives that are not on its METL.

ART 7.7.3.2 PLAN TRAINING

7-87. Identify a desired outcome, develop effective ways of achieving it, recommend the most effective one, and produce a sequence of activities that achieve expected results. ART 7.7.3.2 includes assessing training proficiency, articulating a training vision, issuing training guidance, managing time, establishing training events, and allocating training resources to activities and events. (FM 7-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Training plan reflects command and doctrinal guidance and the existing factors of METT-TC that, if executed will achieve the desired performance in operations.
02	Time	To establish required training program (from mission change).
03	Time	To prepare training plan.
04	Percent	Of METL tasks on which unit is already proficient.

ART 7.7.3.3 PREPARE FOR TRAINING

7-88. Initiate and conduct activities by the unit prior to execution to improve its ability to train successfully. ART 7.7.3.3 includes rehearsals of trainers; pre-execution checks of individuals and units to be trained, trainers to execute and evaluate training, and training support required; assembly of allocated training resources; and elimination of potential training distracters. (FM 7-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Trainers and training resources available and ready for the training audience when they arrive.
02	Time	For units and personnel to begin training.
03	Time	For rehearsals of trainers.
04	Time	To assemble and position training resources.
05	Percent	Of required training resources provided and assembled.

ART 7.7.3.4 EXECUTE TRAINING

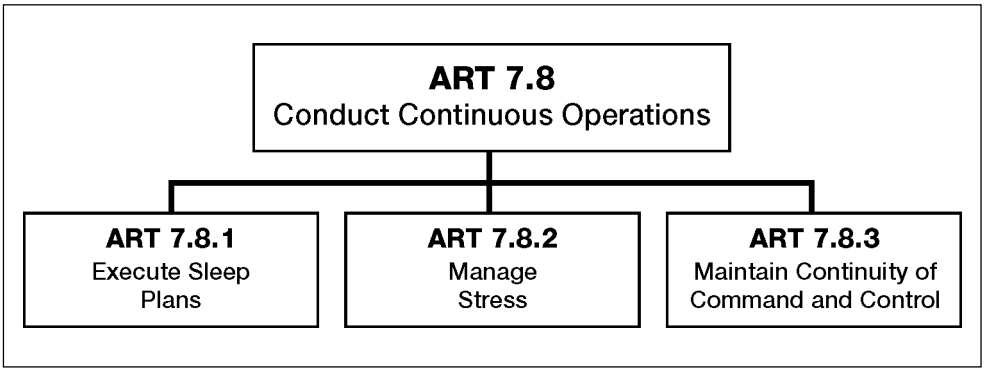
7-89. Put a plan into action by applying training resources to accomplish the training mission or objective. ART 7.7.3.4 includes effective presentation, and practice during execution that is accurate, well structured, efficient, realistic, safe, and effective. (FM 7-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Training conducted to established standards accomplishes training mission.
02	Time	To accomplish required training.
03	Percent	Of units and assigned personnel attending and participating in training.
04	Number	Of accidents during training.
05	Number	Of times that planned training activities are modified for safety considerations.

ART 7.7.3.5 ASSESS TRAINING

7-90. Evaluate the demonstrated ability of individuals, leaders, and units against specified training standards. Training may be evaluated against the training objectives or against the performance standards of the tasks for which being trained. (FM 7-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Commander knows what tasks were accomplished at or above standard and which tasks for which standards were not met.
02	Yes/No	Training evaluated against training objectives or performance standards.
03	Yes/No	The opposing force, training conditions, and observers and controllers are sufficient to trigger realistic training events.
04	Yes/No	At least one AAR conducted per major training event.
05	Time	To devise and conduct training assessments.
06	Percent	Of personnel and units meeting standard.
07	Percent	Of METL trained to standard.
08	Percent	Of METL tasks meeting mission requirements.



SECTION VIII – ART 7.8: CONDUCT CONTINUOUS OPERATIONS

7-91. Execute operations without interruption due to enemy or environmental conditions or actions, and maintain exercise of C2. Sustain effective performance under conditions of uninterrupted operations. (FM 6-0) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit successfully maintains performance during continuous operations.
02	Percent	Of degradation of unit capability to conduct operations effectively over time.
03	Number	Of incidents where a lack of continuity of C2 occurred during operations.

ART 7.8.1 EXECUTE SLEEP PLANS

7-92. Identify, counter, and minimize the degrading effects of night operations and sleep loss on units as they execute continuous operations. (FM 6-22.5) (USACAC)

No.	Scale	Measure
01	Yes/No	Unit sleep plan provides adequate rest for effective performance over time.
02	Yes/No	Unit prepares sleep plan.
03	Yes/No	Unit complies with sleep plan during operations.
04	Percent	Of individuals obtaining sleep within the parameters of FM 6-22.5.
05	Number	Of soldiers unable to perform due to lack of sleep.

ART 7.8.2 MANAGE STRESS

7-93. Identify, counter, and minimize the degrading effects of stress on units as they execute continuous operations. (FM 6-22.5) (USACAC)

No.	Scale	Measure
01	Yes/No	Identify, counter and minimize effects of stress on unit personnel so as to avoid degrading unit performance and mission accomplishment.
02	Incidents	Of misbehavior due to effects of stress.
03	Incidents	Of decisions degraded by stress.

ART 7.8.3 MAINTAIN CONTINUITY OF COMMAND AND CONTROL

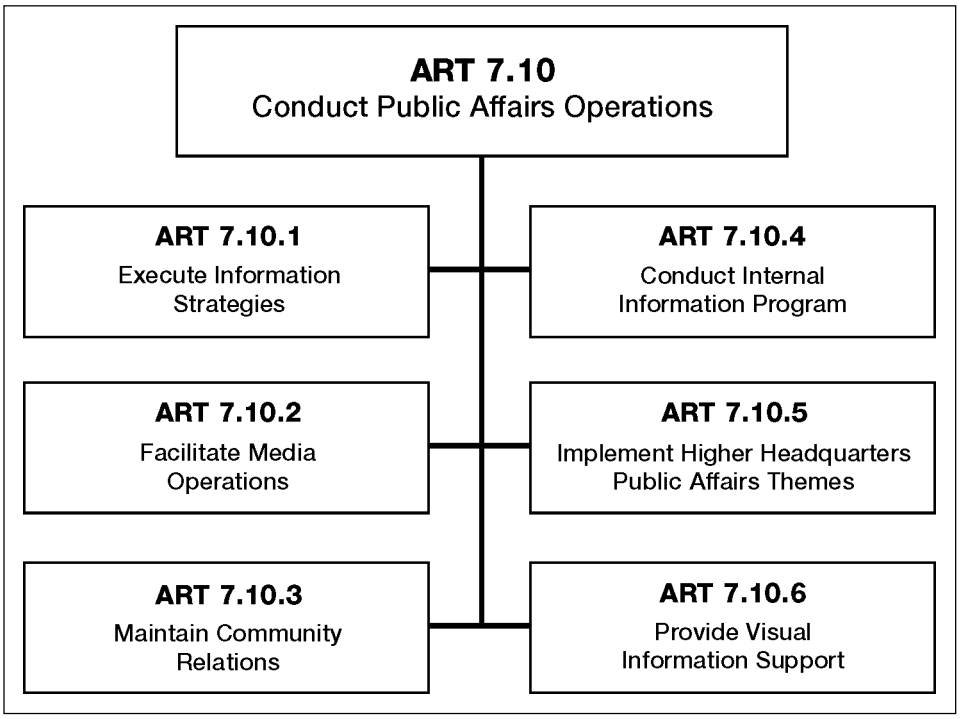
7-94. Ensure—through succession of command and the ability of the commander to exercise C2 continuously from any point in the AO—continuity in the exercise of the authority of command and continuity in the conduct of functions, tasks, or duties necessary to accomplish a military operation or mission. ART 7.8.3 includes maintaining the functions and duties of the commander, as well as the supporting functions and duties performed by the staff and others acting under the authority and direction of the commander. (FM 6-0) (USACAC)

No.	*Scale*	*Measure*
01	Yes/No	Maintain continuity of C2 throughout the mission.
02	Time	Commander not available for command functions.
03	Time	Loss of communications with subordinates.
04	Time	To restore commander's understanding of current situation.
05	Time	To effect succession of command from one commander to another.
06	Number	Of times communications with the commander were lost.
07	Number	Of times the commander lost communications with his subordinates.

SECTION IX – ART 7.9: DEVELOP AND IMPLEMENT COMMAND SAFETY PROGRAM

7-95. Develop and implement command safety and occupational health, risk management, and accident prevention programs. (FM 100-14) (USASC)

No.	*Scale*	*Measure*
01	Yes/No	Command safety program prevents accidents to/by unit personnel.
02	Time	To modify command safety program to include new safety hazards.
03	Number	Of measures introduced to mitigate risk as a result of the risk assessment.
04	Number	Of violations of command safety program occurring within a given time.
05	Number	Of safety hazards not covered initially by command safety program.



SECTION X – ART 7.10: CONDUCT PUBLIC AFFAIRS OPERATIONS

7-96. Advise and assist the commander and command (or host nation in military operations other than war) in public affairs planning. This includes, developing information strategies and program, facilitating media operations, and conducting community relations programs. (FM 46-1) (USAOCPA)

No.	Scale	Measure
01	Yes/No	Public affairs program within the AO supports mission accomplishment.
02	Time	In advance to provide public affairs group for scheduled events.
03	Time	After event to release news.
04	Time	To provide an initial position on breaking news story.
05	Percent	Of plan phases have incorporated public affairs strategy.
06	Percent	Of PA guidance coordinated with operations, plans and policy as needed.

ART 7.10.1 EXECUTE INFORMATION STRATEGIES

7-97. Identify affected internal and external audiences and their information requirements. Determine available communications channels to all audiences. Develop key command messages derived from the overall public affairs strategy. Acquire information to support messages. Process information for delivery through appropriate means. Protect information to meet OPSEC requirements and distribute information to audiences. (FM 46-1) (USAOCPA)

No.	Scale	Measure
01	Yes/No	Information strategies support accomplishment of the unit mission within the AO.
02	Time	To prepare for and conduct first news conference on crisis or major event.
03	Time	Since last national media pool classified briefing.
04	Time	In advance of deployment, to develop and distribute media guidance.
05	Time	Prior to deployment, to establish and disseminate media policy.
06	Time	To develop public affairs mission analysis.
07	Percent	Of press operational access rules and security procedures incorporated in operation plan.
08	Percent	Of releases error free.
09	Number	Of press releases per week.
10	Number	And types of information that is classified or withheld from press to avoid embarrassment.

ART 7.10.2 FACILITATE MEDIA OPERATIONS

7-98. Provide assistance to media that are covering operations. This includes assisting media on coverage ground rules; arranging interviews and briefings; coordinating unit visits and escorts; and providing assistance in arranging transportation, messing, billeting, communications support, protective equipment, and medical care. (FM 46-1) (USAOCPA)

No.	Scale	Measure
01	Yes/No	Unit conduct of media operations supports public affairs operations.
02	Time	To establish information bureau (following execute order).
03	Time	To provide public affairs guidance (after crisis event).
04	Time	To transmit print journalist stories during crisis or combat (from receipt).
05	Time	To close required media equipment (such as commercial television ground stations) to AO.
06	Time	To get DOD media pool into AO.
07	Percent	Of media requests for access to key senior officials accepted.
08	Percent	Of media support requests answered.

ART 7.10.3 MAINTAIN COMMUNITY RELATIONS

7-99. Assist civil affairs personnel in conducting (planning, preparing, executing, and assessing) community relations programs as resources permit. ART 7.10.3 can occur in an AO or in the sustaining base (CONUS or forward presence). It includes the conduct of programs to establish and sustain mutually beneficial relationships with the public, focusing on communities neighboring or directly affected by Army activities. (FM 46-1) (USAOCPA)

No.	Scale	Measure
01	Yes/No	Community relations program supports unit mission accomplishment within the AO and at home base.

No.	Scale	Measure
02	Time	To set up hometown news release program to publicize troops' accomplishments.
03	Time	To develop public opinion baseline.
04	Percent	Of local customs, laws, and policies concerning presence of media researched and included in planning.
05	Percent	Of requests for information from organizations and private citizens answered.

ART 7.10.4 CONDUCT INTERNAL INFORMATION PROGRAM

7-100. Provide information of interest to US military forces, to include data that the commander wants his soldiers to know. (FM 46-1) (USAOCPA)

No.	Scale	Measure
01	Yes/No	Soldiers know the information that their commander wants them to know.
02	Time	To establish newsletter or newspaper for deployed troops.
03	Percent	Of forces consuming internally prepared information.
04	Number	Of internal news releases per week.

ART 7.10.5 IMPLEMENT HIGHER HEADQUARTERS PUBLIC AFFAIRS THEMES

7-101. Transmit themes and information from higher headquarters to the US military audience as part of an echelon's internal information program. (FM 46-1) (USAOCPA)

No.	Scale	Measure
01	Yes/No	Implement higher headquarters public affairs themes to support mission accomplishment within the AO.
02	Time	To prepare higher headquarters public affairs themes for dissemination to forces.
03	Percent	Of higher headquarters public affairs themes disseminated to forces.
04	Percent	Of favorable response in forces to higher headquarters public affairs themes.

ART 7.10.6 PROVIDE VISUAL INFORMATION SUPPORT

7-102. Create a record of unit activities. Still and motion video recordings include friendly forces, equipment, and positions before, during, and after engagements; terrain features in current or projected operational areas; battle damage to friendly, enemy, or indigenous property; any essential element of friendly information that assists a commander in conducting (planning, preparing executing, and assessing) operations. (FM 6-02.40) (USASC&FG)

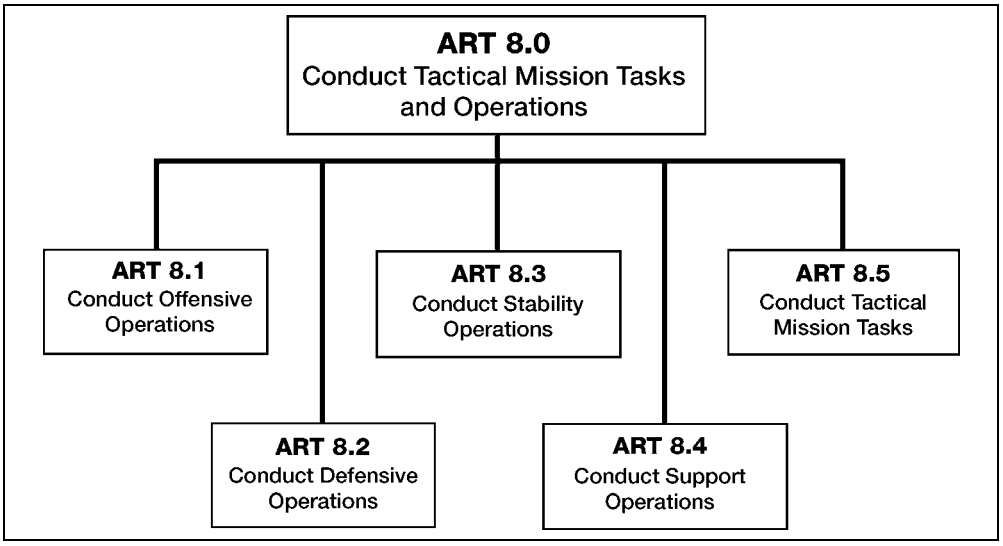
No.	Scale	Measure
01	Yes/No	Visual information support assists the commander with the operations process.

No.	Scale	Measure
02	Time	To provide combat camera detachment commander when determined necessary.
03	Time	To process media and produce imagery for short notice tasking.
04	Time	To provide finished imagery products to customers.
05	Time	To provide finished imagery products to customers in United States.
06	Time	To respond to and be on scene for short notice tasking.
07	Time	To review selected combat camera materials (for release, until release, including products to be released by public affairs representatives, prior to delivery to the releasing agency).
08	Percent	Of photographic images and electronic documentation available.
09	Percent	Of presented coverage deemed suitable by customer (such as audience attention and share).
10	Percent	Of subject coverage requests filled.

Chapter 8

ART 8.0: Conduct Tactical Mission Tasks and Operations

Tactical proficiency is not defined by mastery of written doctrine, but by the ability to employ available means to win battles and engagements. A tactical solution may not match any previous example; however, the language used to communicate that concept must be technically precise and doctrinally consistent, using commonly understood and accepted terms and concepts. The chapter sustains this doctrinal consistency by delineating the tactical missions and operations conducted by Army tactical forces. **A tactical mission task is a specific activity performed by a unit while executing a form of tactical operation or form of maneuver. It may be expressed in terms of either actions by a friendly force or effects on an enemy force.** The tactical mission tasks provide commanders, their staffs, combat developers, training developers and doctrine analysts a resource to assist in identifying missions units are to accomplish. Training developers use this chapter to base collective training plans on one or more of these missions.

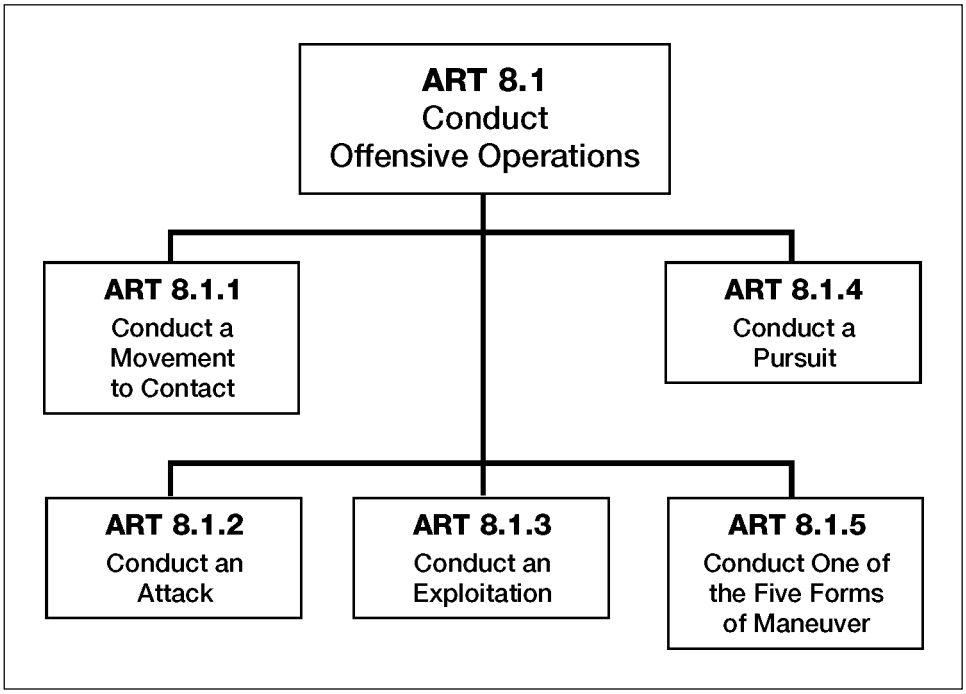


MEASURES OF ACCOMPLISHMENT

8-1. Measures of any mission accomplishment are both objective and subjective in their evaluation by commanders. The most critical measure for

all Army tactical missions and tasks is if the mission is accomplished. There is no other measure above this one. To measure mission accomplishment commanders must also consider if mission accomplishment was within:

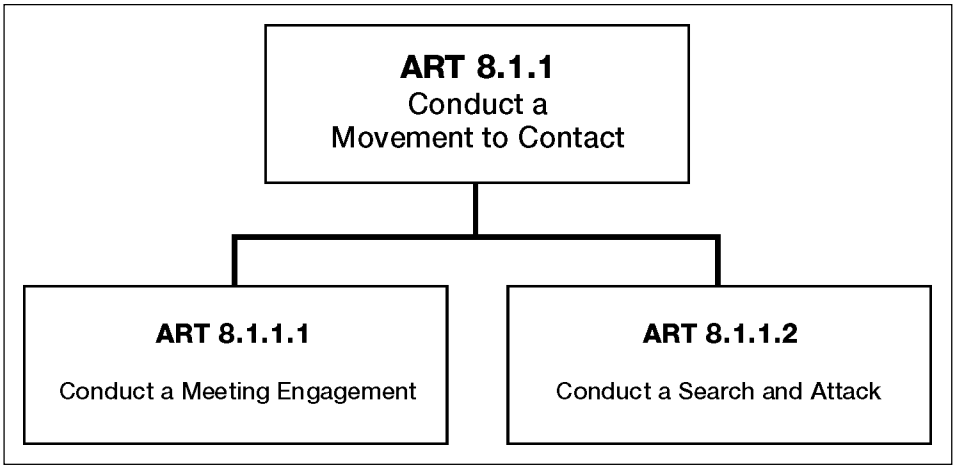
- Higher commander's intent statement of what the force must do and the conditions,
- Specified timeline,
- Commander's risk assessment for fratricide avoidance and collateral damage,
- Minimum expenditure of resources,
- Unit's capability of continuing or being assigned future missions and operations.



SECTION I – ART 8.1: CONDUCT OFFENSIVE OPERATIONS

8-2. Offensive operations aim at destroying or defeating an enemy. Their purpose is to impose the commander's will on the enemy and achieve decisive victory. Offensive operations seek to seize, retain, and exploit the initiative. Army force commanders attack enemies simultaneously throughout the AO to throw them off balance, overwhelm their capabilities, disrupt their defenses, and ensure their defeat or destruction. The offense ends when the force achieves the purpose of the operation, reaches a limit of advance, or approaches culmination. Army forces conclude a phase of an offensive by consolidating gains, resuming the attack, or preparing for future operations. Additional tasks that offensive operations accomplish include disrupting enemy coherence, securing or seizing terrain, denying the enemy resources, fixing the enemy, and gaining information. Types of offensive operations include movement to contact, attack, exploitation, and pursuit. The forms of

maneuver are envelopment, turning movement, frontal attack, penetration, and infiltration. (FM 3-0) (USACAC)



ART 8.1.1 CONDUCT A MOVEMENT TO CONTACT

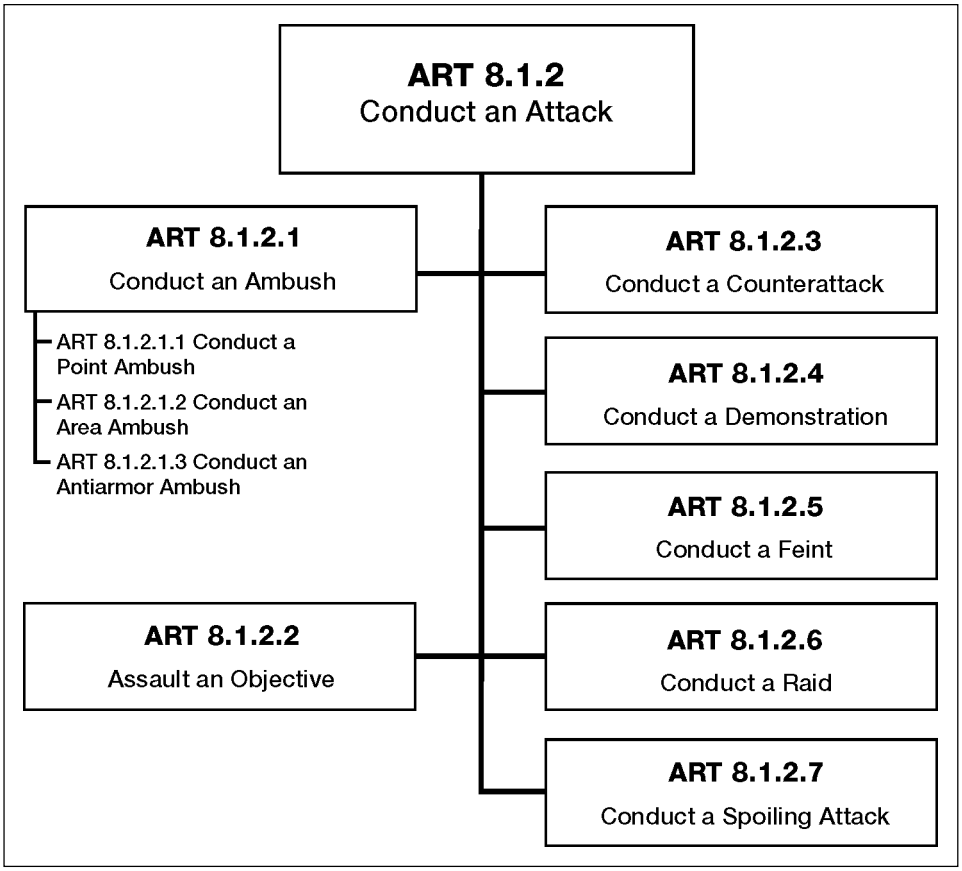
8-3. The movement to contact is an offensive action designed to develop the situation and establish or regain contact. Forces conducting a movement to contact seek to make contact with the smallest forces feasible. A movement to contact may result in a meeting engagement. (FM 3-90) (USACAC)

ART 8.1.1.1 CONDUCT A MEETING ENGAGEMENT

8-4. A meeting engagement is a combat action that occurs when a moving force engages an enemy at an unexpected time and place. Such encounters normally occur by chance in small unit operations, typically when two moving forces collide. They may result in brigade or larger unit operations when intelligence, surveillance, and reconnaissance operations have been ineffective. Meeting engagements can also occur when opposing forces are aware of the general presence, but not the exact location, of each other, and both decide to attack immediately. (FM 3-90) (USACAC)

ART 8.1.1.2 CONDUCT A SEARCH AND ATTACK

8-5. Search and attack is a technique for conducting a movement to contact that shares many of the characteristics of an area security mission. (FM 3-90) (USACAC)



ART 8.1.2 CONDUCT AN ATTACK

8-6. An attack is an offensive operation that destroys or defeats enemy forces, seizes and secures terrain, or both. Attacks incorporate coordinated movement supported by direct and indirect fires. They may be either decisive or shaping operations. Attacks may be hasty or deliberate, depending on the time available for assessing the situation, planning, and preparing. (FM 3-90) (USACAC)

ART 8.1.2.1 Conduct an Ambush

8-7. An ambush is an attack by fire or other destructive means from concealed positions on a moving or temporarily halted enemy. An ambush destroys enemy forces by maximizing the element of surprise. Ambushes can employ direct fire systems as well as other destructive means, such as command-detonated mines, nonlethal fires, and indirect fires. They may include an assault to close with and destroy the enemy force. (FM 3-90) (USACAC)

ART 8.1.2.1.1 Conduct a Point Ambush

8-8. A point ambush is a surprise attack by fire or other destructive means from concealed positions on a moving or temporarily halted enemy in the vicinity of a given point. It may include an assault to close with and destroy the enemy force. (FM 7-10) (USAIS)

ART 8.1.2.1.2 Conduct an Area Ambush

8-9. An area ambush consists of a series of surprise attacks by fire or other destructive means from concealed positions on a moving or temporarily halted enemy within a specific area. It may include an assault to close with and destroy the enemy force. (FM 7-20) (USAIS)

ART 8.1.2.1.3 Conduct an Antiarmor Ambush

8-10. An antiarmor ambush is a surprise attack by fire or other destructive means from concealed positions on moving or temporarily halted enemy armored vehicles. The ambush ends with the displacement of the antiarmor system to preclude its destruction by enemy counterambush actions. (FM 3-21.91) (USAIS)

ART 8.1.2.2 ASSAULT AN OBJECTIVE

8-11. The assault on an objective is a short, violent, but well ordered attack against an objective. It is the climax of an attack and involves the act of closing with the enemy, including the possible conduct of hand-to-hand fighting. (FM 3-90) (USACAC)

ART 8.1.2.3 CONDUCT A COUNTERATTACK

8-12. A counterattack is an attack by part or all of a defending force against an attacking force with the general objective of denying the attackers their goals. Commanders normally conduct counterattacks from a defensive posture. They direct them to defeat or destroy enemy forces, or to regain control of terrain and facilities after enemy successes. They counterattack after enemies launch an attack, reveal their main effort, or offer an assailable flank. (FM 3-90) (USACAC)

ART 8.1.2.4 CONDUCT A DEMONSTRATION

8-13. A demonstration is an attack designed to deceive enemies as to the location or time of the decisive operation by a display of force. Forces conducting a demonstration do not seek contact. Demonstrations are shaping operations. They seek to mislead enemies concerning the attacker's true intentions. They facilitate decisive operations by fixing enemies or diverting their attention from the decisive operation. Commanders allow enemies to detect a demonstration. (FM 3-90) (USACAC)

ART 8.1.2.5 CONDUCT A FEINT

8-14. A feint is an attack used to deceive enemies as to the location or time of the actual decisive operation. Forces conducting a feint seek direct fire contact but avoid decisive engagement. Feints divert attention from the decisive operation and prevent the enemy from focusing combat power against it. They are usually shallow, limited-objective attacks conducted before or during the decisive operation. (FM 3-90) (USACAC)

ART 8.1.2.6 CONDUCT A RAID

8-15. A raid is an attack, usually small scale, involving a swift entry into hostile territory to secure information, confuse the enemy, or destroy installations. It usually ends with a planned withdrawal from the objective

area upon mission completion. Raids have narrowly defined purposes. They require both detailed intelligence and deliberate planning. Raids may destroy key enemy installations and facilities, capture or free prisoners, or disrupt enemy C2 or other important systems. (FM 3-90) (USACAC)

ART 8.1.2.7 CONDUCT A SPOILING ATTACK

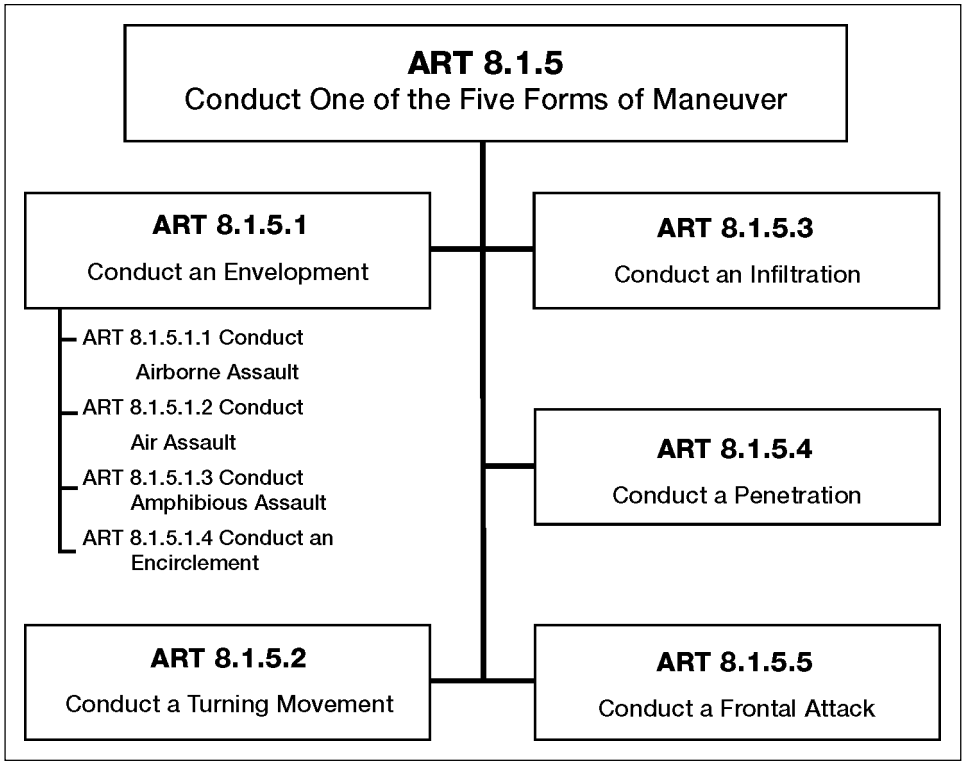
8-16. A spoiling attack is an attack that preempts or seriously impairs an enemy attack while the enemy is in the process of planning or preparing for it. Normally conducted from a defensive posture, spoiling attacks strike where and when enemies are most vulnerable—during preparations for attack in assembly areas and attack positions or while they are moving toward their line of departure. Therefore, proper timing and coordination with higher headquarters are critical requirements for spoiling attacks. A spoiling attack is highly dependent on accurate information on enemy dispositions. (FM 3-90) (USACAC)

ART 8.1.3 CONDUCT AN EXPLOITATION

8-17. Exploitation is an offensive operation that usually follows a successful attack designed to disorganize the enemy in depth. Exploitations seek to disintegrate enemy forces to the point where they have no alternative but surrender or take flight. Exploitations take advantage of tactical opportunities, foreseen or unforeseen. Division and higher headquarters normally plan exploitations as branches or sequels. (FM 3-90) (USACAC)

ART 8.1.4 CONDUCT A PURSUIT

8-18. A pursuit is an offensive operation designed to catch or cut off an enemy force attempting to escape with the aim of destroying it (JP 1-02). Pursuits are decisive operations that follow successful attacks or exploitations. They occur when enemies fail to organize a defense and attempt to disengage. If it becomes apparent that resistance has broken down entirely and the enemy is fleeing, a force can transition to a pursuit from any type of offensive operation. Pursuits entail rapid movement and decentralized control. (FM 3-90) (USACAC)



ART 8.1.5 CONDUCT ONE OF THE FIVE FORMS OF MANEUVER

8-19. The forms of maneuver are envelopment, turning movement, infiltration, penetration, and frontal attack. While normally combined, each form of maneuver attacks the enemy differently. A single operation may contain several forms of offensive maneuver; for example, a frontal attack to clear a security area may be followed by a penetration to create a gap in the defenses. This could be followed by an envelopment to destroy the first line of defense. Each form of maneuver poses different challenges for attackers and different dangers for defenders. Commanders determine the form of maneuver to use by analyzing the factors of METT-TC. (FM 3-90) (USACAC)

ART 8.1.5.1 CONDUCT AN ENVELOPMENT

8-20. An envelopment is a maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives to the enemy rear and destroying enemy forces in their current positions. At the tactical level, envelopments focus on seizing terrain, destroying specific enemy forces, and interdicting enemy withdrawal routes. Envelopments avoid the enemy front, where enemy forces are protected and can easily concentrate fires. Single envelopments maneuver against one enemy flank; double envelopments maneuver against both. A vertical envelopment (an air assault or airborne operation) creates an assailable flank by arriving from an unexpected direction. An envelopment may result in an encirclement. (FM 3-90) (USACAC)

Note: Airborne, air assault, and amphibious operations are tactical aspects of forcible entry operations. Joint force commanders conduct forcible entry

operations at the operational level. (See JP 3-18.) Forcible entry operation tasks are addressed in the UJTL.

ART 8.1.5.1.1 Conduct an Airborne Assault into Area of Operations

8-21. An airborne assault secures a defendable airhead from which to conduct lodgment activities. This mission begins when paratroopers and equipment exit the aircraft by parachute or are air landed. It includes the actions of pathfinders. The mission ends when all elements of the relevant airborne echelon are delivered to the objective area and the assault objective has been seized. (FM 3-90) (USACAC)

Notes:
Marshalling of forces for airborne operations is addressed as ART 2.3.1.3 (Marshal Forces to Conduct an Airborne Assault).

The air movement phase of airborne operations is addressed as ART 6.3.3.2 (Move by Air).

Tasks for the ground tactical-phase of airborne operations duplicate missions contained elsewhere in this chapter.

ART 8.1.5.1.2 Conduct an Air Assault

8-22. An air assault secures a defendable airhead or other key terrain from which to conduct lodgment activities or follow-on tactical operations. The mission ends when all elements of the relevant air assault echelon are delivered to the objective area and the assault objective has been seized. (FM 90-4) (USAIS)

Notes:
ART 8.1.5.1.2 does not include air traffic control. Air traffic control is addressed under ART 7.6.1.7 (Control Tactical Airspace).

ART 8.1.5.1.2 does not include efforts to improve the landing zone. Landing zone improvement is addressed under ART 5.0 (Mobility/Countermobility/ Survivability Battlefield Operating System).

Pickup zone operations are addressed as ART 2.3.1.4 (Conduct Pickup Zone Operations).

The air movement phase of air assault operations is addressed as ART 6.3.3.2 (Move by Air).

Tasks for the ground tactical phase of air assault operations duplicate missions contained elsewhere in this chapter.

ART 8.1.5.1.3 Conduct an Amphibious Assault

8-23. An amphibious assault secures a defendable beachhead from which to conduct lodgment activities. This mission begins when soldiers and equipment leave the ships that bring them to the amphibious objective area and transfer to the landing craft that will deliver them to the beach. The

mission ends when all elements of the amphibious force are delivered into the beachhead and the assault objective has been seized (JP 3-18.). (USMC-CDC)

Note: Army forces follow joint doctrine and Marine Corps doctrinal publications when tasked to conduct amphibious operations.

ART 8.1.5.1.4 Conduct an Encirclement

8-24. Encirclements are operations where one force loses its freedom of maneuver because an opposing force is able to isolate it by controlling all ground lines of communications. (FM 3-90)(USACAC)

ART 8.1.5.2 CONDUCT A TURNING MOVEMENT

8-25. A turning movement is a maneuver in which an attacking force seeks to avoid the enemy's principal defensive positions by seizing objectives to the enemy rear and causing enemy forces to move out of their positions or divert major forces to meet the threat. (FM 3-90) (USACAC)

ART 8.1.5.3 CONDUCT AN INFILTRATION

8-26. An infiltration is a maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage while exposing only small elements to enemy defensive fires. (FM 3-90) (USACAC)

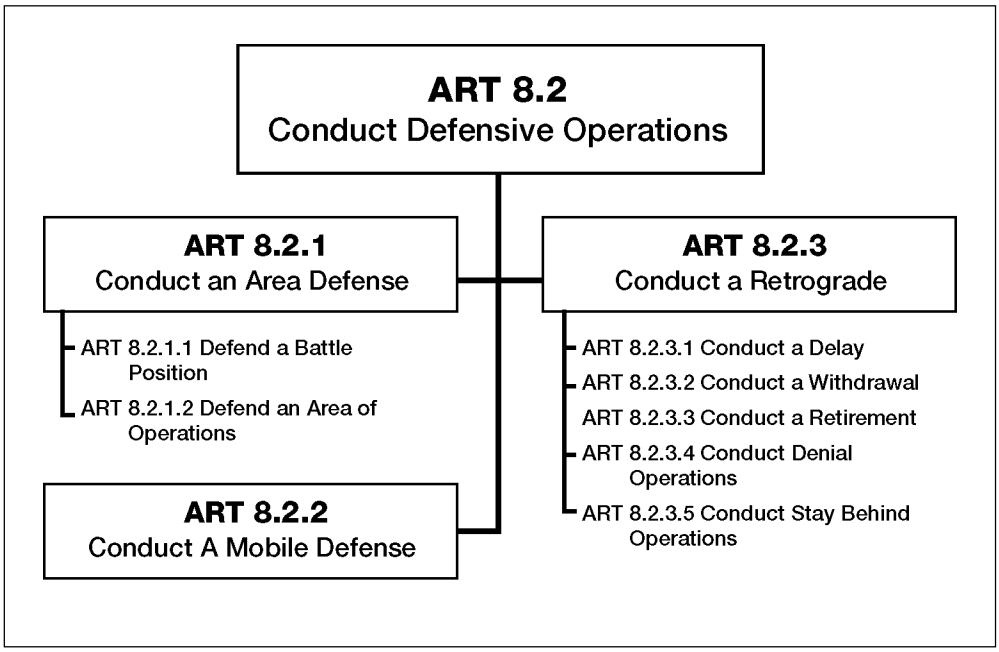
Note: Infiltration is also a tactical march technique used within friendly territory to move forces in small groups at extended or irregular intervals. (See FM 3-90.)

ART 8.1.5.4 CONDUCT A PENETRATION

8-27. A penetration is a maneuver in which an attacking force seeks to rupture enemy defenses on a narrow front to disrupt the defensive system. Commanders direct penetrations when enemy flanks are not assailable or time does not permit another form of maneuver. Successful penetrations create assailable flanks and provide access to enemy rear areas. (FM 3-90) (USACAC)

ART 8.1.5.5 CONDUCT A FRONTAL ATTACK

8-28. A frontal attack is a maneuver in which an attacking force seeks to destroy a weaker enemy force or fix a larger enemy force in place over a broad front. At the tactical level, an attacking force can use a frontal attack to rapidly overrun a weaker enemy force. A frontal attack strikes the enemy across a wide front and over the most direct approaches. Commanders normally use it when they possess overwhelming combat power and the enemy is at a clear disadvantage. (FM 3-90) (USACAC)



SECTION II – ART 8.2: CONDUCT DEFENSIVE OPERATIONS

8-29. Defensive operations defeat an enemy attack, buy time, economize forces, or develop conditions favorable for offensive operations. Defensive operations alone normally cannot achieve a decision. Their purpose is to create conditions for a counteroffensive that allows Army forces to regain the initiative. Although offensive operations are usually required to achieve decisive results, it is often necessary, even advisable at times, to defend. (FM 3-90)

ART 8.2.1 CONDUCT AN AREA DEFENSE

8-30. The area defense concentrates on denying an enemy force access to designated terrain for a specific time rather than destroying the enemy outright. The bulk of the defending force combine static defensive positions, engagement areas, and small, mobile reserves to retain ground. Keys to successful area defenses include effective and flexible control, synchronization and distribution of fires. Area defenses can also be part of a larger mobile defense. (FM 3-90) (USACAC)

ART 8.2.1.1 DEFEND A BATTLE POSITION

8-31. This task involves denying an enemy force access to the terrain encompassed by a specific battle position. The battle position is a tactical control graphic that depicts the location and general orientation of the majority of the defending forces. There are five kinds of battle positions, to include the strongpoint. (FM 3-90) (USACAC)

ART 8.2.1.2 DEFEND AN AREA OF OPERATIONS

8-32. This task involves denying an enemy force access across a designated area of operations. (FM 3-90) (USACAC)

ART 8.2.2 CONDUCT A MOBILE DEFENSE

8-33. The mobile defense concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force. A mobile defense requires defenders to have greater mobility than attackers. Defenders combine offensive, defensive, and delaying actions to lure attackers into positions where they are vulnerable to counterattack. (FM 3-90) (USACAC)

ART 8.2.3 CONDUCT A RETROGRADE

8-34. The retrograde is a defensive operation that involves organized movement away from the enemy. The three forms of retrograde operations are delays, withdrawals, and retirements. A commander can direct the conduct of denial operations and stay-behind operations as subordinate activities within the context of a retrograde operation. Commanders use retrogrades as part of a larger scheme of maneuver to create conditions to regain the initiative and defeat the enemy. Retrogrades improve the current situation or prevent a worse situation from occurring. (FM 3-90) (USACAC)

ART 8.2.3.1 CONDUCT A DELAY

8-35. A delay is a retrograde in which a force under pressure trades space for time by slowing the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged. Delays gain time for friendly forces to establish defenses, cover defending or withdrawing units, protect friendly unit flanks, contribute to economy of force, draw the enemy into unfavorable positions, and determine the enemy main effort. (FM 3-90) (USACAC)

ART 8.2.3.2 CONDUCT A WITHDRAWAL

8-36. A withdrawal is a planned operation in which a force in contact disengages from an enemy force. Withdrawals may involve all or part of a committed force. Commanders conduct withdrawals to preserve the force, release it for a new mission, avoid combat under undesirable conditions, or reposition forces. Enemy pressure may or may not be present during withdrawals. Withdrawing forces may be unassisted or assisted by another friendly force. (FM 3-90) (USACAC)

ART 8.2.3.3 CONDUCT A RETIREMENT

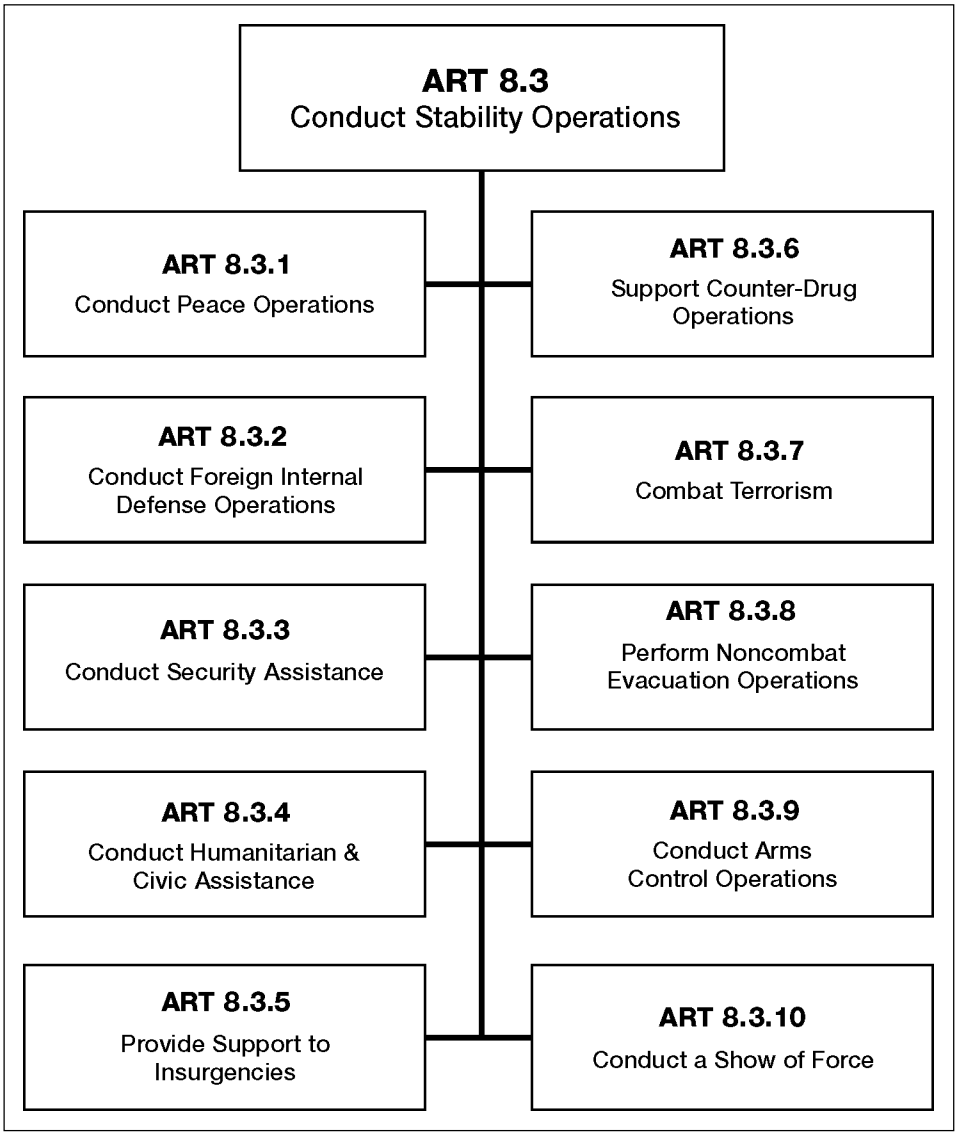
8-37. A retirement is a retrograde in which a force not in contact with the enemy moves away from the enemy. (FM 3-90) (USACAC)

ART 8.2.3.4 CONDUCT DENIAL OPERATIONS

8-38. Denial operations hinder or deny the enemy the use of space, personnel, supplies, or facilities. It may include destroying, removing, or contaminating those supplies and facilities, or erecting obstacles. (FM 3-90) (USACAC)

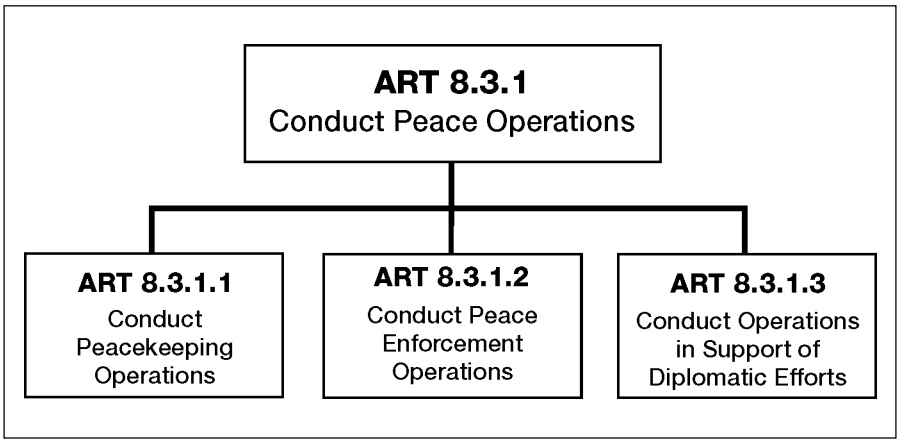
ART 8.2.3.5 CONDUCT STAY-BEHIND OPERATIONS

8-39. A stay-behind operation occurs when a commander leaves a unit in position to conduct a specified mission while the remainder of the force withdraws or retires from an area. (FM 3-90) (USACAC)



SECTION III – ART 8.3: CONDUCT STABILITY OPERATIONS

8-40. Stability operations employ Army forces outside the United States and US territories to promote and protect US national interests by influencing the threat, political, and information dimensions of the operational environment. This is done through a combination of peacetime developmental, cooperative activities and coercive actions in response to crisis. Army forces accomplish stability goals through engagement and response. The military activities that support stability operations are diverse, continuous, and often long-term. Their overarching purpose is to promote and sustain regional and global stability. (FM 3-0) (USACAC)



ART 8.3.1 CONDUCT PEACE OPERATIONS

8-41. Army forces conduct peace operations to support strategic and policy objectives and their implementing diplomatic activities. Peace operations encompass peacekeeping operations and peace enforcement operations conducted to support diplomatic efforts to establish and maintain peace. Although the United States reserves the right to conduct peace operations unilaterally, it will normally participate in peace operations under the sponsorship of the United Nations or another multinational organization. (FM 3-0) (USACAC)

ART 8.3.1.1 CONDUCT PEACEKEEPING OPERATIONS

8-42. Peacekeeping operations are military operations undertaken with the consent of all major parties to a dispute. They are designed to monitor and facilitate implementation of agreements (cease fire, truce, or other such agreements), and support diplomatic efforts to reach a long-term political settlement. Peacekeeping operations usually involve observing, monitoring, or supervising and assisting parties to a dispute. To achieve their objectives, Army forces conducting peacekeeping operations rely on the legitimacy acknowledged by all major belligerents and international or regional organizations. They use or threaten the use of force only in self-defense or as a last resort. (FM 3-0) (USACAC)

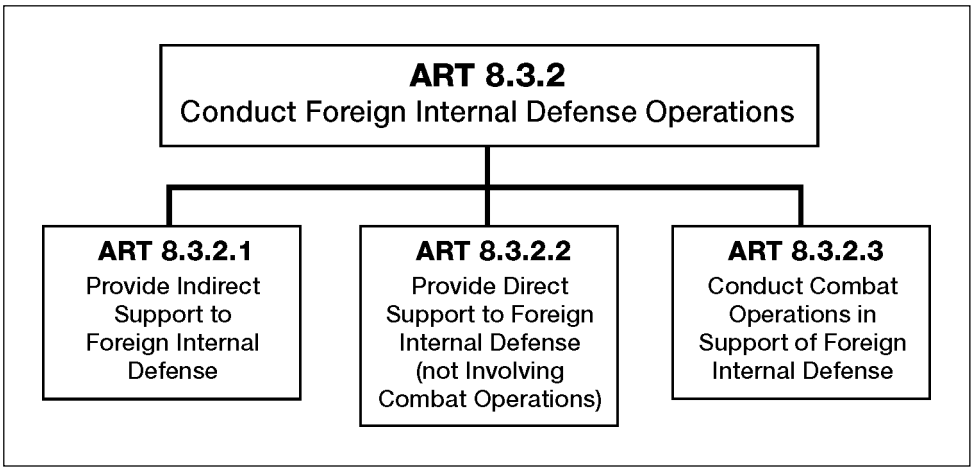
ART 8.3.1.2 CONDUCT PEACE ENFORCEMENT OPERATIONS

8-43. Peace enforcement operations are the application of military force, or the threat of its use, normally pursuant to international authorization, to compel compliance with resolutions or sanctions designed to maintain or restore peace and order. Unlike peacekeeping operations, peace enforcement operations do not require the consent of all parties. Peace enforcement operations maintain or restore peace and support diplomatic efforts to reach a long-term political settlement. Army forces assigned a peace enforcement mission must be able to apply sufficient combat power for self-defense and to forcibly accomplish assigned tasks. Units must also be prepared to transition to peacekeeping operations. Peace enforcement operations normally include one or more of six subordinate operations: forcible separation of belligerents, establishment and supervision of protected areas, sanction and exclusion zone enforcement, movement denial and guarantee, restoration and

maintenance of order, and protection of humanitarian assistance. (FM 3-07) (USACAC)

ART 8.3.1.3 CONDUCT OPERATIONS IN SUPPORT OF DIPLOMATIC EFFORTS

8-44. Army forces support diplomatic efforts to establish peace and order before, during, and after conflicts. These operations include preventive diplomacy, peacemaking, and peace building. Army forces support preventive diplomacy by conducting preventive deployments or shows of force as part of efforts to deter conflict. Support to peacemaking operations often includes military-to-military contacts, exercises, peacetime deployments, and security assistance. Support to peace building involves the same activities as longer-term foreign internal defense operations (See ART 8. 3.2, Conduct Foreign Internal Defense Operations) (FM 3-07) (USACAC)



ART 8.3.2 CONDUCT FOREIGN INTERNAL DEFENSE OPERATIONS

8-45. Foreign internal defense is participation by civilian and military agencies of one government in programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency. It involves all elements of national power and can occur across the range of military operations. Foreign internal defense is a primary program that supports friendly nations operating against or threatened by hostile elements. It promotes stability by helping a host nation establish and preserve institutions and facilities responsive to its people's needs. Army forces participating in foreign internal defense normally advise and assist host-nation forces conducting operations. Foreign internal defense is also a specified and significant mission for selected Army special operations forces. However, it requires joint planning, preparation, and execution to ensure the efforts of all service and functional components are mutually supportive and focused. (FM 3-07) (USACAC)

ART 8.3.2.1 PROVIDE INDIRECT SUPPORT TO FOREIGN INTERNAL DEFENSE

8-46. Indirect support emphasizes the principles of host-nation self-sufficiency and builds strong national infrastructures through economic and military capabilities. Examples include security assistance programs, multinational exercises, and exchange programs. Indirect support reinforces

the legitimacy and primacy of the host-nation government in addressing internal problems. (See ART 8. 3.3, Conduct Security Assistance) (FM 3-07) (USACAC)

ART 8.3.2.2 PROVIDE DIRECT SUPPORT TO FOREIGN INTERNAL DEFENSE (NOT INVOLVING COMBAT OPERATIONS)

8-47. Direct support (not involving combat operations) involves the use of US forces providing direct assistance to the host-nation civilian populace or military. Direct support includes civil-military operations, intelligence, communications sharing, and logistics. Direct support does not usually involve transferring arms and equipment or training local military forces. (FM 3-07) (USACAC)

ART 8.3.2.3 CONDUCT COMBAT OPERATIONS IN SUPPORT OF FOREIGN INTERNAL DEFENSE

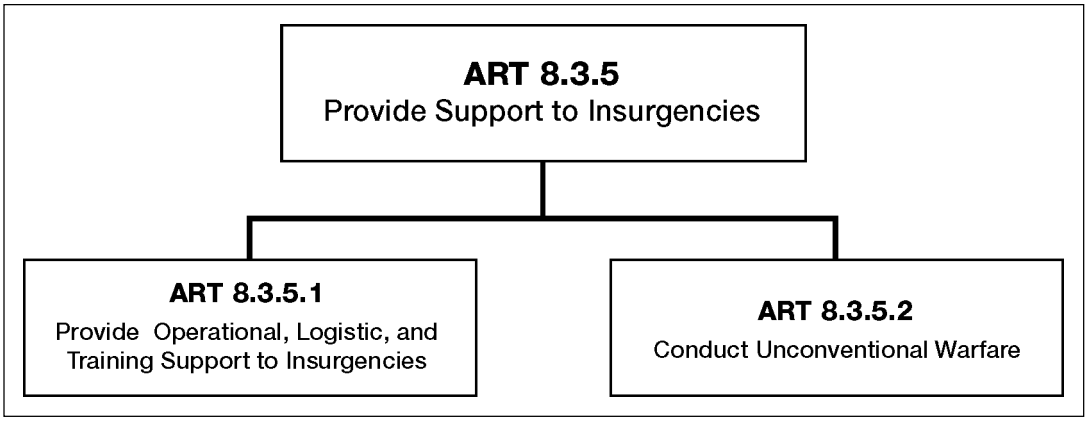
8-48. Combat operations include offensive and defensive operations conducted by US forces to support a host-nation fight against insurgents or terrorists. Most foreign internal defense activities focus on helping a host nation prevent the development of an active insurgency. If an insurgency already exists or preventive measures fail, foreign internal defense focuses on eliminating, marginalizing, or reassimilating the insurgent element into society. The United States provides military support to counterinsurgency efforts, recognizing that military power alone cannot achieve lasting success. US military power cannot, and will not, ensure the survival of regimes that fail to meet their people's basic needs. Military programs and US actions promote a secure environment in which to implement programs that eliminate causes of insurgency and encourage insurgents to rejoin civil society. As with other foreign internal defense actions, combat operations in support of foreign internal defense must continue to balance security with economic development to enhance or reestablish stability. Such actions are generally accompanied by indirect and direct support to foreign internal defense (See ART 8.3.5.1, Provide Operational, Logistic and Training Support to Insurgencies, and ART 8.3.5.2, Conduct Unconventional Warfare) (FM 3-07) (USACAC)

ART 8.3.3 CONDUCT SECURITY ASSISTANCE

8-49. Security assistance refers to a group of programs that support US national policies and objectives by providing defense articles, military training, and other defense-related services to foreign nations by grant, loan, credit, or cash sales. Examples of US security assistance programs are Foreign Military Sales, Foreign Military Financing, International Military Education and Training, the Economic Support Fund, and Arms Export Control Act-licensed commercial sales. Army forces support security assistance efforts through military training teams, maintenance support personnel and training, and related activities, such as humanitarian mine removal operations. (FM 3-07) (USACAC)

ART 8.3.4 CONDUCT HUMANITARIAN AND CIVIC ASSISTANCE

8-50. Humanitarian and civic assistance programs consist of assistance provided in conjunction with military operations and exercises. By law, humanitarian and civic assistance are authorized by the secretary of state, and planned and appropriated in the Army budget. Humanitarian and civic assistance must enhance the security interests of both the United States and host nation and increase the operational readiness of the units and soldiers performing the mission. In contrast to humanitarian and disaster relief conducted under foreign humanitarian assistance operations (see ART 8.4.2, Conduct Foreign Humanitarian Assistance Operations), humanitarian and civic assistance are planned activities with specific budget limitations. Humanitarian and civic assistance are limited to the following categories: medical, dental and veterinary care for rural areas of a country; construction of rudimentary surface transportation systems; well drilling and construction of basic sanitation facilities, rudimentary construction and repair of public facilities, and specified activities related to mine detection and clearance, including education, training, and technical assistance. (FM 3-07) (USACAC)



ART 8.3.5 PROVIDE SUPPORT TO INSURGENCIES

8-51. Insurgencies are movements organized to overthrow a constituted government through the use of subversion and armed conflict. On order of the National Command Authorities, Army forces support insurgencies that oppose regimes that threaten US interests or regional stability. While any Army force can be tasked to support an insurgency, Army special operations forces usually receive these missions. The training, organization, and regional focus of Army special operations forces make them well suited for these operations. Army forces supporting insurgencies may provide operational, logistic and training support. They may also support an insurgency by conducting conventional and unconventional warfare. (FM 3-07) (USACAC)

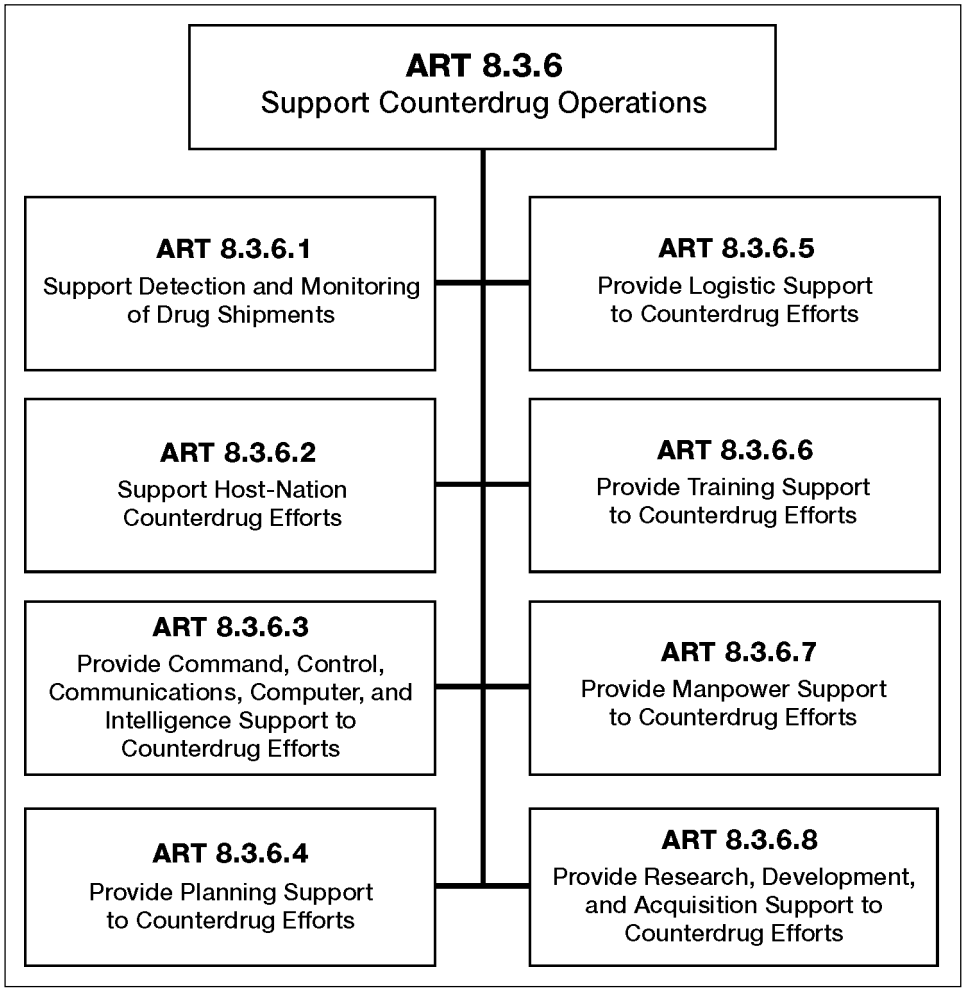
ART 8.3.5.1 PROVIDE OPERATIONAL, LOGISTIC AND TRAINING SUPPORT TO INSURGENCIES

8-52. Provide support to insurgencies in the form of equipment, training, and services. Services can include command and control, communications, computers and intelligence support; support for planning, organization,

recruitment; logistics; psychological operations; facilities usage; equipment loans; and covert operational support and special activities. (FM 3-07) (USACAC)

ART 8.3.5.2 CONDUCT UNCONVENTIONAL WARFARE

8-53. Unconventional warfare is a broad spectrum of military and paramilitary operations. They are normally of long duration and predominately conducted by indigenous or surrogate forces organized, trained, equipped, supported, and directed in varying degrees by an external source. It includes offensive low visibility, covert, or clandestine operations, such as guerrilla warfare and the related activities of subversion, sabotage, intelligence activities, and unconventional assisted recovery. (FM 3-07) (USACAC)



ART 8.3.6 SUPPORT COUNTERDRUG OPERATIONS

8-54. The Army participates in counterdrug operations under provisions of the national drug control strategy. Army forces may be employed in a variety of operations to support other agencies responsible for detecting, disrupting,

interdicting, and destroying illicit drugs and the infrastructure (personnel, materiel, and distribution systems) of illicit drug-trafficking entities. When conducted inside the United States and its territories, they are domestic support operations. When conducted outside the United States and its territories, counterdrug operations are considered stability operations. Army forces do not engage in direct action in counterdrug operations. Units that support counterdrug operations comply with US and foreign legal limitations concerning the acquisition of information on civilians and the conduct of law enforcement activities. (FM 3-07) (USACAC)

ART 8.3.6.1 SUPPORT DETECTION AND MONITORING OF DRUG SHIPMENTS

8-55. Provide aerial and ground reconnaissance to support counterdrug operations by law enforcement agencies. The goal is to provide early notification to—and, as necessary, prolonged tracking of—aerial and surface targets for appropriate law enforcement agencies. This support enables law enforcement agencies to conduct interceptions, searches, arrests of traffickers, and seizures of illegal drugs and illegally obtained property. Aerial reconnaissance may be conducted with fixed or rotary wing aircraft, unmanned aerial vehicles, or ground-based radars. Land reconnaissance may be conducted by observation posts, patrols, ground surveillance radars, and remote ground sensors. (FM 3-07) (USACAC)

ART 8.3.6.2 SUPPORT HOST-NATION COUNTERDRUG EFFORTS

8-56. Army forces support counterdrug efforts indirectly through civilian agencies of the US government and the civilian or military organizations of the host country. Overseas, Army forces may engage in two kinds of support to foreign countries: security assistance and civil-military operations. Most counterdrug efforts support US foreign internal defense initiatives. Security assistance support for counterdrug operations includes equipment, services, and training. Civil-military operations can enhance US counterdrug operations in foreign countries, primarily through civil affairs and psychological operations activities. (FM 3-07) (USACAC)

ART 8.3.6.3 PROVIDE COMMAND, CONTROL, COMMUNICATION, COMPUTER, AND INTELLIGENCE SUPPORT TO COUNTERDRUG EFFORTS

8-57. Army personnel and equipment may assist law enforcement agencies and host nations in designing, implementing, and integrating command, control, communication, computer, and intelligence systems. Army personnel support national and departmental drug operations and law enforcement agency analytical centers. In addition, Army forces provide liaison to law enforcement agencies and host nations to facilitate smooth and successful integration of military support. Army units and personnel provide intelligence support targeted at the full range of narcotics traffickers' operations. The principal means of providing this support is through tactical analysis teams. These teams co-locate with the US country team, support law enforcement agencies, and provide focused detection and monitoring of narcotics trafficking activities. (FM 3-07) (USACAC)

ART 8.3.6.4 PROVIDE PLANNING SUPPORT TO COUNTERDRUG EFFORTS

8-58. Army personnel support counterdrug planning of both law enforcement agencies and host nations. Understanding the supported agency or host

nation, including its culture and people, is critical. Planning support provided to law enforcement agencies must take into account the organization's mission, current goals, structure or chain of command, measures of success, and relationships with other governmental agencies or countries. Planning support provided to host nations is similar to that provided to domestic law enforcement agencies. However, the host nation's culture, historical perspectives, political climate, and the economic conditions are also considered. (FM 3-07) (USACAC)

ART 8.3.6.5 PROVIDE LOGISTIC SUPPORT TO COUNTERDRUG EFFORTS

8-59. Army forces can assist law enforcement agencies or host nations during their conduct of counterdrug operations with logistic management and execution. This includes transportation, maintenance, engineer design and construction, use of facilities, equipment loans, or military working dog support. Army forces can provide supplies and field services directly, if authorized, or assist other agencies in procuring and managing them from other sources. Commanders who assist law enforcement with transportation of evidence, seized property, or contraband must be aware that a law enforcement officer must accompany the shipment to ensure continuity of the chain of custody. (FM 3-07) (USACAC)

ART 8.3.6.6 PROVIDE TRAINING SUPPORT TO COUNTERDRUG EFFORTS

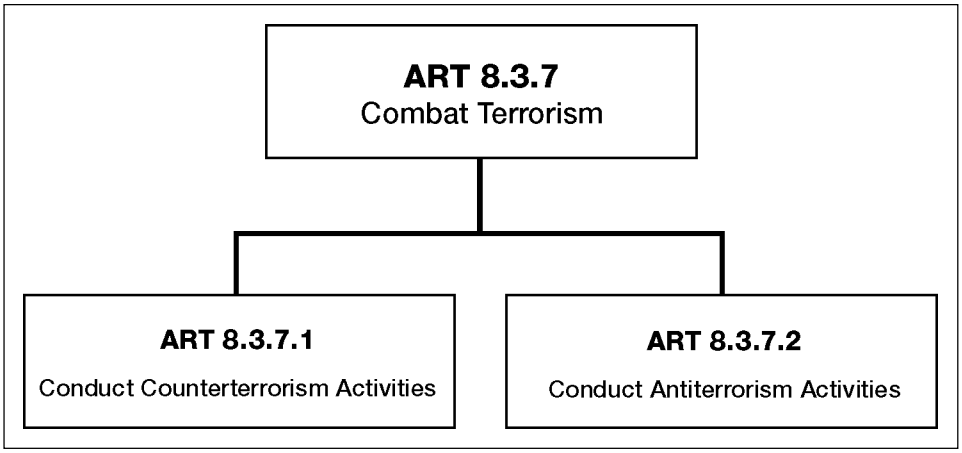
8-60. Training support to law enforcement agencies and host nations includes basic military skills, such as basic marksmanship, patrolling, mission planning, medical, and survival skills. Commanders provide support using a mix of mobile training teams; participation in operations planning groups, joint and/or combined exercises, institutional training, non-institutional training, and training simulations; and by providing extended training service specialists. (FM 3-07) (USACAC)

ART 8.3.6.7 PROVIDE MANPOWER SUPPORT TO COUNTERDRUG EFFORTS

8-61. Army forces may provide a variety of individuals or units to support host-nation and interagency counterdrug efforts. Categories of manpower support are eradication, administrative—including staff judge advocate officers, legal specialists, and accounting specialists— linguist, liaison officer, inspection, military police, and intelligence analyst. (FM 3-07) (USACAC)

ART 8.3.6.8. PROVIDE RESEARCH, DEVELOPMENT, AND ACQUISITION SUPPORT TO COUNTERDRUG EFFORTS

8-62. The Army Counterdrug Research, Development, and Acquisition Office makes military research, development, and acquisition efforts available to law enforcement agencies. It informs them of new technical capabilities that have possible law enforcement application. It can also assist them in contracting and procuring technical equipment. (FM 3-07) (USACAC)



ART 8.3.7 COMBAT TERRORISM

8-63. Terrorism is the calculated use of unlawful violence or threat of unlawful violence to inculcate fear. It is intended to coerce or intimidate governments or societies in pursuit of goals that are generally political, religious, or ideological. Enemies who cannot compete with Army forces conventionally often turn to terrorist tactics. Terrorist attacks often create a disproportionate effect on even the most capable conventional forces. The tactics used by terrorists range from arson to the use of weapons of mass destruction. Army forces routinely conduct operations to deter or defeat these attacks. Offensively oriented operations are categorized as counterterrorism; defensively oriented operations are antiterrorism. (FM 3-07) (USACAC)

ART 8.3.7.1 CONDUCT COUNTERTERRORISM ACTIVITIES

8-64. Counterterrorism is offensive measures taken to prevent, deter, and respond to terrorism. Army forces participate in the full array of counterterrorism actions, including strikes and raids against terrorist organizations and facilities outside the United States and its territories. Counterterrorism is a specified mission for selected special operations forces that operate under direct control of the president or secretary of defense or under a combatant command arrangement. Public law assigns the lead for counterterrorism within the United States to the FBI and outside the United States to the Department of State. Commanders who employ conventional forces against organized terrorist forces operating within their areas of operations are conducting conventional offensive operations, not counterterrorism operations. (FM 3-07) (USACAC)

ART 8.3.7.2 CONDUCT ANTITERRORISM ACTIVITIES

8-65. Antiterrorism reduces the vulnerability of individuals and property to terrorist attacks, including limited response and containment by local military forces. Antiterrorism is a consideration for all forces during all types of military operations. These actions occur throughout the world and are closely linked to ART 6.0 (Combat Service Support Battlefield Operating System). (FM 3-07) (USACAC)

ART 8.3.8 PERFORM NONCOMBATANT EVACUATION OPERATIONS

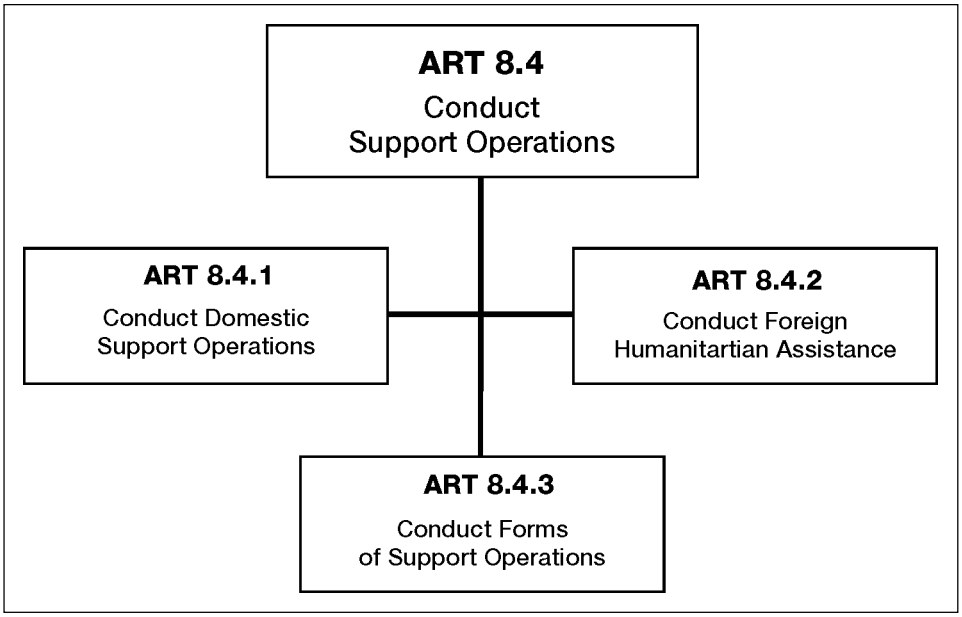
8-66. NEOs relocate threatened civilian noncombatants from locations in a foreign nation to secure areas. Normally, these operations involve US citizens whose lives are in danger, either from the threat of hostilities or from a natural disaster. They may also include host-nation citizens and third country nationals. Army forces, normally as part of a joint task force, conduct NEOs to assist and support the Department of State. NEOs usually involve swift insertions of a force, temporary occupation of an objective, and a planned withdrawal upon completion of the mission. A NEO can take place in three environments (permissive, uncertain, or hostile). The environment in which a NEO occurs can quickly change from one to another with little warning. The commander conducting a NEO must prepare to operate in all three environments. This task includes combat service support functions involving emergency medical treatment, transportation, administrative processing, and coordination with the Department of State and other agencies involved in the evacuation. Task organization for NEO is based on the operational environment in which the action is conducted. However, since the environment can change rapidly, the permissive form of NEO can become uncertain or hostile. (FM 3-07) (USACAC)

ART 8.3.9 CONDUCT ARMS CONTROL OPERATIONS

8-67. Army forces normally conduct arms control operations to support arms control treaties and enforcement agencies. Army forces can assist in locating, seizing, and destroying weapons of mass destruction after hostilities. Other actions include escorting deliveries of weapons and material (such as enriched uranium) to preclude loss or unauthorized use, inspecting and monitoring production and storage facilities, and training foreign forces to secure weapons and facilities. Army forces may conduct arms control operations to prevent escalation of a conflict and reduce instability. This could include the mandated disarming of belligerents as part of a peace operation. (FM 3-07) (USACAC)

ART 8.3.10 CONDUCT A SHOW OF FORCE

8-68. Shows of force are flexible deterrence options designed to demonstrate US resolve. They involve increasing the visibility of US deployed forces to defuse a situation that, if allowed to continue, may be detrimental to national interests or objectives. The United States conducts shows of force for three reasons: to bolster or reassure allies, deter potential aggressors, and gain or increase influence. Shows of force demonstrate a credible and specific threat to an aggressor or potential aggressor. They involve increasing the visibility of US forces in the eyes of the target audience through establishing an area presence and conducting exercises and demonstrations. Presence patrols conducted by small tactical units are one technique of conducting shows of force. Although actual combat is not desired, shows of force can rapidly and unexpectedly escalate. Therefore, units assigned a show of force mission assume that combat is probable and prepare accordingly. All actions ordinarily associated with the projection of a force to conduct combat operations pertain to show of force deployments. (FM 3-07) (USACAC)



SECTION IV – ART 8.4: CONDUCT SUPPORT OPERATIONS

8-69. Army forces conduct support operations to assist civil authorities, foreign or domestic, as they prepare for or respond to crises and relieve suffering. In support operations, Army forces provide essential support, services, and assets, or specialized resources, to help civil authorities deal with situations beyond their capabilities. The purpose of support operations is to meet the immediate needs of designated groups for a limited time, until civil authorities are able to do so without Army assistance. In extreme or exceptional cases, Army forces may provide relief or assistance directly to those in need. More commonly, Army forces help civil authorities or nongovernmental organizations provide the required support. Army forces often conduct support operations as stand-alone missions. However, most offensive, defensive, and stability operations require complementary support operations before, during, and after execution. There are two types of support operations: domestic support operations and foreign humanitarian assistance. (FM 3-0) (USACAC)

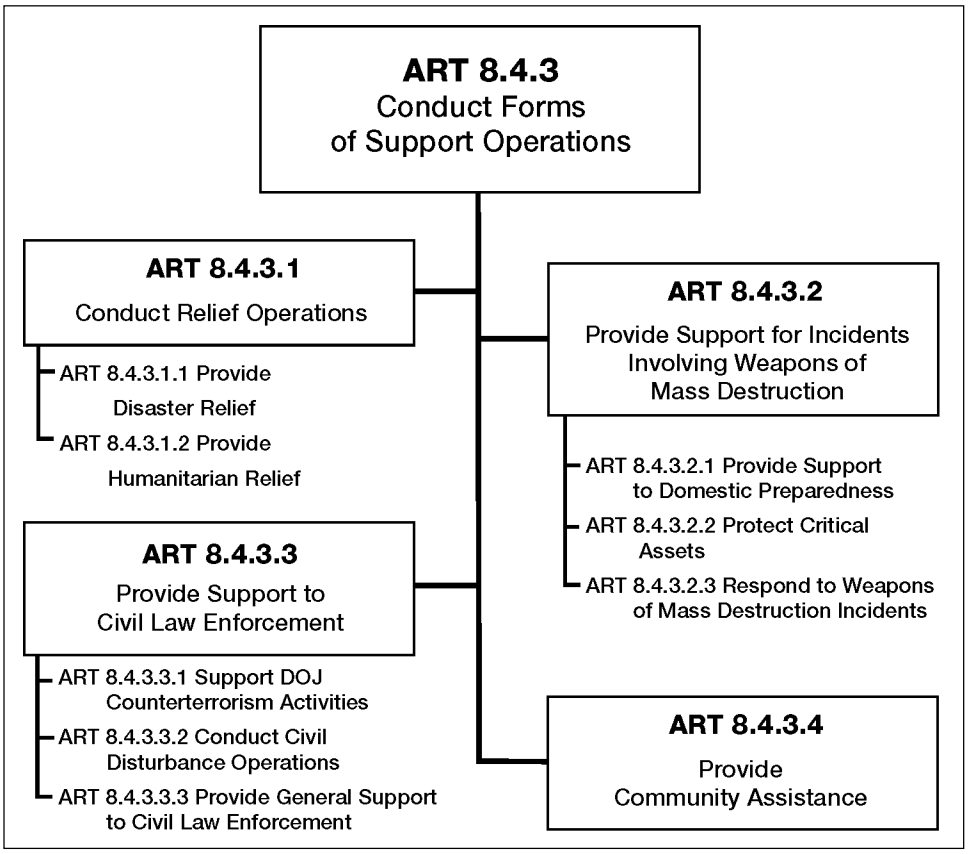
ART 8.4.1 CONDUCT DOMESTIC SUPPORT OPERATIONS

8-70. Domestic support operations provide DOD support to civil authorities in domestic emergencies, as well as for designated law enforcement and other activities. They include activities and measures taken by DOD to foster mutual assistance and support between DOD and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies. Domestic support operations only occur within the United States and its territories. Army support to domestic support operations supplements the efforts and resources of state and local governments and organizations. A presidential declaration of a major

disaster or emergency usually precedes domestic support operations. Domestic support operations require extensive coordination and liaison among many organizations—interagency, joint, active component, and reserve component—as well as with state and local governments. (FM 3-07) (USACAC)

ART 8.4.2 CONDUCT FOREIGN HUMANITARIAN ASSISTANCE

8-71. Foreign humanitarian assistance operations occur outside the United States and its territories. Army forces usually conduct them to relieve or reduce the results of natural or manmade disasters. They also relieve conditions—such as pain, disease, hunger, or privation—that present a serious threat to life or loss of property. Army forces supplement or complement efforts of host-nation civil authorities or other agencies that provide assistance. Army forces participate in foreign humanitarian assistance operations that may be unilateral, multinational, or United Nations-coordinated responses. Foreign humanitarian assistance is limited in scope and duration. It focuses exclusively on prompt aid to resolve an immediate crisis. Longer-term activities designed to support full recovery and a return to predisaster conditions will normally become part of a combatant commander's theater engagement plan. In such cases, a foreign humanitarian assistance operation transitions to a stability operation. (FM 3-07) (USACAC)



ART 8.4.3 CONDUCT FORMS OF SUPPORT OPERATIONS

8-72. Army forces involved in support operations execute overlapping forms of support operations. The forms of support operations are relief operations, support for incidents involving weapons of mass destruction, support to civil law enforcement, and community assistance. (FM 3-07) (USACAC)

ART 8.4.3.1 CONDUCT RELIEF OPERATIONS

8-73. Disaster relief operations focus on recovery of critical infrastructure after natural or manmade disasters. Humanitarian relief focuses on the well-being of supported populations. Both normally occur simultaneously. In the case of a disaster, state, local, and host-nation authorities are responsible for restoring essential services. (FM 3-07) (USACAC)

ART 8.4.3.1.1 Provide Disaster Relief

8-74. Disaster relief restores or recreates essential infrastructure. It includes establishing and maintaining the minimum safe working conditions, less security measures, necessary to protect relief workers and the affected population. (Overseas, Army forces may provide security as part of a stability operation.) Disaster relief allows effective humanitarian relief and creates the conditions for long-term recovery. It may involve consultation on and provision of emergency medical treatment and evacuation; repairing or demolishing damaged structures; restoring or building bridges, roads, and airfields; and removing debris from supply routes and relief sites. (FM 3-07) (USACAC)

ART 8.4.3.1.2 Provide Humanitarian Relief

8-75. Humanitarian relief focuses on lifesaving measures that alleviate the immediate needs of a population in crisis. It often includes providing medical support, food, water, medicine, clothing, blankets, shelter, and heating or cooking fuels. In some cases, it involves transporting affected people from a disaster area. Civilian relief agencies, governmental and nongovernmental, are best suited to provide this type of relief. Army forces conducting humanitarian relief usually facilitate civil relief efforts. (FM 3-07) (USACAC)

ART 8.4.3.2 PROVIDE SUPPORT FOR INCIDENTS INVOLVING WEAPONS OF MASS DESTRUCTION

8-76. Weapons of mass destruction incidents involve a nuclear, biological, chemical, or radiological weapon or device, or a large conventional explosive, that produces catastrophic loss of life or property. They are deliberate or unintentional. Until it is determined that the damaged site does not contain a radiological, biological or chemical agent, a large explosive event may be handled as a weapons of mass destruction incident. Army forces assist civil authorities in protecting US territory, population, and infrastructure before an attack by supporting domestic preparedness and protection of critical assets. When directed by DOD, Army forces can respond to a weapons of mass destruction incident and deal with the consequences of the event. (FM 3-07) (USACAC)

ART 8.4.3.2.1 Provide Support to Domestic Preparedness

8-77. The National Domestic Preparedness Office, under the Federal Emergency Management Agency (FEMA), orchestrates the national domestic preparedness effort. Army forces have an important role in aiding domestic preparedness efforts at the local, state, and federal level. These efforts strengthen the existing expertise of civil authorities through training. They also provide the expert assistance necessary to respond to nuclear, biological, or chemical incidents. Army forces provide training to enhance state and local emergency response capabilities so they can respond to incidents. An interagency agreement establishes the Department of Justice as domestic preparedness coordinator. (FM 3-07) (USACAC)

ART 8.4.3.2.2 Protect Critical Assets

8-78. Hostile forces may attack facilities essential to society, the government, and the military. These assaults can disrupt civilian commerce, government operations, and military capabilities. Critical assets include telecommunications, electric power, public health services and facilities, gas and oil, banking and finance, transportation, water, emergency services, and government continuity. DODD 5160.54 identifies specific civil infrastructure assets necessary to conduct military operations. The integrity, availability, survivability, and capability of these assets are vital for conducting full spectrum operations. In conjunction with civil law enforcement, Army forces may protect these assets or temporarily restore lost capability. Army involvement complements and leverages related interagency programs and activities. (FM 3-07) (USACAC)

ART 8.4.3.2.3 Respond to Weapons of Mass Destruction Incidents

8-79. Other government agencies have primary responsibility for responding to domestic terrorist and weapons of mass destruction incidents. Local authorities will be the first to respond to a weapons of mass destruction incident. However, Army forces have a key supporting role and can quickly respond when authorized. For example, the Army National Guard has specialized weapons of mass destruction response teams that act as advance parties to facilitate follow-on deployment of other DOD assets. In a permissive overseas environment, the National Command Authorities may make Army assets available to assist a foreign government after a weapons of mass destruction incident. Such assistance may be linked to concurrent relief operations. The different responsibilities of DOD and other agencies are established in federal law, the Federal Response Plan (to include its terrorist incident annex), other federal plans, and joint doctrine and directives. The resources required for dealing with weapons of mass destruction incidents differ from those needed during conventional disasters. (FM 3-07) (USACAC)

ART 8.4.3.3 PROVIDE SUPPORT TO CIVIL LAW ENFORCEMENT

8-80. Support to domestic civil law enforcement involves activities related to the Department of Justice's counterterrorism activities, counterdrug, military assistance during civil disturbances, and general support. Army support involves providing resources, training, or augmentation. Federal military forces remain under the military chain of command while supporting civil law enforcement. The supported law enforcement agency coordinates Army force activities in accordance with appropriate civil laws and interagency agreements. Army National Guard units in state status can be a particularly useful military resource. They may be able to provide assistance to civil authorities when federal units cannot due to the Posse Comitatus Act. Title 10 USC prohibits the military from directly participating in arrests, searches, seizures, or other similar activities unless authorized by law. (FM 3-07) (USACAC)

Note. Army missions related to supporting civil law enforcement in counterdrug operations are discussed under ART 8. 3.6, Support Counterdrug Operations.

ART 8.4.3.3.1 Support Department of Justice Counterterrorism Activities

8-81. When directed by the National Command Authorities, Army forces may provide assistance to the Department of Justice in the areas of transportation, equipment, training, and personnel. When terrorists pose an imminent threat, Army forces may be used to counter these threats. Army forces may also support crisis management. Crisis management of a terrorist incident includes measures to resolve a situation and investigate a criminal case for prosecution under federal law. The FBI is the lead agency and has responsibility for crisis management within the United States. Army forces may provide specialized or technical capabilities to assist in defusing or resolving a terrorist crisis. Support of crisis management includes opening lines of communication for military assistance, evacuating casualties, reconnaissance, and decontaminating or assessing the effects of weapons of

mass destruction. In the aftermath of a terrorist incident, Army forces may be involved in consequence management activities. These activities include casualty and medical assistance, evaluation and repair of damage to structures and utilities, explosive ordnance disposal, and mortuary affairs. (FM 3-07) (USACAC)

ART 8.4.3.3.2 Conduct Civil Disturbance Operations

8-82. The Army assists civil authorities in restoring law and order when state and local law enforcement agencies are unable to control civil disturbances. The Army National Guard is the first military responder during most civil disturbance situations. It usually remains on state active-duty status throughout the operation. When the conditions of domestic violence and disorder endanger life and property to the extent that state law enforcement agencies, to include the Army National Guard, cannot suppress violence and restore law and order, the president may federalize Army National Guard units under Title 10 USC, Chapter 15. The president may use federalized Army National Guard and federal forces to restore law and order. Restrictions may be placed on federal military forces, either in the presidential executive order directing their use or through the rules for the use of force outlined in the DOD Civil Disturbance Plan (Garden Plot). (FM 3-07) (USACAC)

ART 8.4.3.3.3 Provide General Support to Civil Law Enforcement

8-83. Provide limited military support to law enforcement agencies. DOD may direct Army forces to provide training to federal, state, and local civilian law enforcement agencies. Such assistance may include training in the operation and maintenance of military equipment. (FM 3-07) (USACAC)

ART 8.4.3.4 PROVIDE COMMUNITY ASSISTANCE

8-84. Community assistance is a broad range of activities that provide support and maintain a strong connection between the military and civilian communities. Community assistance activities provide effective means of projecting a positive military image, providing training opportunities, and enhancing the relationship between the Army and the American public. They should fulfill community needs that would not otherwise be met. Community assistance activities can enhance individual and unit combat readiness. Army assistance to the community can include the following services: air ambulance support, search and rescue, firefighting capability, explosive ordnance disposal, emergency or broad-based medical care, wildlife and domestic animal management, assistance in safety and traffic control, emergency snow removal, temporary supplemental housing for the displaced or disadvantaged, postal augmentation. (FM 3-0) (USACAC)

ART 8.5
Conduct Tactical Mission Tasks

ART 8.5.1 Attack by Fire an Enemy Force/Position
ART 8.5.2 Block an Enemy Force
ART 8.5.3 Breach Enemy Defensive Positions
ART 8.5.4 Bypass Enemy Obstacles/Forces/Positions
ART 8.5.5 Canalize Enemy Movement
ART 8.5.6 Clear Enemy Forces
ART 8.5.7 Conduct Counterreconnaissance
ART 8.5.8 Contain an Enemy Force
ART 8.5.9 Control an Area
ART 8.5.10 Defeat an Enemy Force
ART 8.5.11 Destroy a Designated Enemy Force/Position
ART 8.5.12 Disengage from a Designated Enemy Force
ART 8.5.13 Disrupt a Designated Enemy Force's Formation/Tempo/Timetable
ART 8.5.14 Conduct an Exfiltration
ART 8.5.15 Fix an Enemy Force
ART 8.5.16 Follow and Assume the Missions of a Friendly Force
ART 8.5.17 Follow and Support the Actions of a Friendly Force
ART 8.5.18 Interdict an Area/Route to Prevent/Disrupt/Delay its Use by an Enemy Force
ART 8.5.19 Isolate an Enemy Force
ART 8.5.20 Neutralize an Enemy Force
ART 8.5.21 Occupy an Area
ART 8.5.22 Reduce an Encircled/Bypassed Enemy Force
ART 8.5.23 Retain a Terrain Feature
ART 8.5.24 Secure a Unit/Facility/Location
ART 8.5.25 Seize an Area
ART 8.5.26 Support by Fire the Maneuver of Another Friendly Force
ART 8.5.27 Suppress a Force/Weapon System
ART 8.5.28 Turn an Enemy Force
ART 8.5.29 Conduct Combat Search and Rescue
ART 8.5.30 Conduct Consolidation and Reorganization Activities
ART 8.5.31 Reconstitute Tactical Forces
- ART 8.5.31.1 Reorganize Units as Part of a Reconstitution Effort
- ART 8.5.31.2 Regenerate Units and Organizations as Part of a Reconstitution Effort
- ART 8.5.31.3 Conduct Weapon System Replacement Operations

SECTION V – ART 8.5: CONDUCT TACTICAL MISSION TASKS

8-85. Tactical mission tasks describe the results or effects the commander wants to achieve—the what or why of a mission statement. These tasks have specific military definitions that are different from those found in a dictionary. The tasks in this section are often given to small units as the tasks or purpose parts of their mission statement. (FM 3-90) (USACAC)

ART 8.5.1 ATTACK BY FIRE AN ENEMY FORCE/POSITION

8-86. Attack by fire uses direct fires, supported by indirect fires, to engage an enemy without closing with him to destroy, suppress, fix, or deceive him. (FM 3-90) (USACAC)

ART 8.5.2 BLOCK AN ENEMY FORCE

8-87. Block denies the enemy access to an area or prevents his advance in a direction or along an avenue of approach. (FM 3-90) (USACAC)

ART 8.5.3 BREACH ENEMY DEFENSIVE POSITIONS

8-88. Breach employs all available means to break through or secure a passage through a defense, obstacle, minefield, or fortification. (FM 3-90) (USACAC)

ART 8.5.4 BYPASS ENEMY OBSTACLES/FORCES/POSITIONS

8-89. Bypass is when the commander directs his unit to maneuver around an obstacle, position, or enemy force to maintain the momentum of the operation, while deliberately avoiding combat with the enemy force. (FM 3-90) (USACAC)

ART 8.5.5 CANALIZE ENEMY MOVEMENT

8-90. Canalize is when the commander restricts enemy movement to a narrow area by exploiting terrain, obstacles, fires, or friendly maneuver. (FM 3-90) (USACAC)

ART 8.5.6 CLEAR ENEMY FORCES

8-91. Clear requires the commander to remove all enemy forces and eliminate organized resistance within an assigned area. The physical conditions of the area will affect the specific tactics, techniques, and procedures employed. (FM 3-90) (USACAC)

ART 8.5.7 CONDUCT COUNTERRECONNAISSANCE

8-92. Counterreconnaissance encompasses all measures taken by a commander to counter enemy reconnaissance and surveillance efforts. Counterreconnaissance is not a distinct mission, but a component of all forms of security operations. (See ART 5.3.5, Conduct Security Operations) (FM 3-90) (USACAC)

ART 8.5.8 CONTAIN AN ENEMY FORCE

8-93. Contain requires the commander stop, hold, or surround enemy forces; or cause them to focus their activity on a given front and prevent them from withdrawing any element for use elsewhere. (FM 3-90) (USACAC)

ART 8.5.9 CONTROL AN AREA

8-94. Control requires the commander to maintain physical influence over a specified area to prevent its use by an enemy. (FM 3-90) (USACAC)

ART 8.5.10 DEFEAT AN ENEMY FORCE

8-95. Defeat occurs when an enemy force has temporarily or permanently lost the physical means or will to fight. The defeated force's commander is unwilling or unable to pursue his adopted course of action, thereby yielding to the friendly commander's will and can no longer interfere to a significant degree with the actions of friendly forces. Defeat can result from the use of force or the threat of its use. (FM 3-90) (USACAC)

ART 8.5.11 DESTROY A DESIGNATED ENEMY FORCE/POSITION

8-96. Destroy involves the physical rendering of an enemy force to combat ineffectiveness until it is reconstituted. Alternatively, to destroy a combat system is to damage it so badly that it cannot perform its function or be restored to a usable condition without being entirely rebuilt. (FM 3-90) (USACAC)

ART 8.5.12 DISENGAGE FROM A DESIGNATED ENEMY FORCE

8-97. Disengagement is when a commander has his unit break contact with the enemy to allow the conduct of another mission or to avoid decisive engagement. (FM 3-90) (USACAC)

ART 8.5.13 DISRUPT A DESIGNATED ENEMY FORCE'S FORMATION/ TEMPO/TIMETABLE

8-98. Disrupt is when a commander integrates direct and indirect fires, terrain, and obstacles to upset an enemy formation or tempo, interrupt his timetable, or cause his forces to commit prematurely or attack in a piecemeal fashion. (FM 3-90) (USACAC)

ART 8.5.14 CONDUCT AN EXFILTRATION

8-99. Exfiltrate is where a commander removes personnel or units from areas under enemy control by stealth, deception, surprise, or clandestine means. (FM 3-90) (USACAC)

ART 8.5.15 FIX AN ENEMY FORCE

8-100. Fix is where a commander prevents the enemy from moving any part of his force from a specific location for a specific period of time. (FM 3-90) (USACAC)

ART 8.5.16 FOLLOW AND ASSUME THE MISSIONS OF A FRIENDLY FORCE

8-101. Follow and assume is when a second committed force follows a force conducting an offensive operation and is prepared to continue the mission of that force when it becomes fixed, attritted, or otherwise unable to continue. (FM 3-90) (USACAC)

ART 8.5.17 FOLLOW AND SUPPORT THE ACTIONS OF A FRIENDLY FORCE

8-102. Follow and support is when a committed force follows and supports the mission accomplishment of a leading force conducting an offensive operation. (FM 3-90) (USACAC)

ART 8.5.18 INTERDICT AN AREA/ROUTE TO PREVENT/DISRUPT/ DELAY ITS USE BY AN ENEMY FORCE

8-103. Interdict is where the commander prevents, disrupts, or delays enemy use of an area or route. (FM 3-90) (USACAC)

ART 8.5.19 ISOLATE AN ENEMY FORCE

8-104. Isolate requires a unit to seal off—physically and psychologically—an enemy force from its sources of support, deny it freedom of movement, and prevent it from contacting other enemy forces. (FM 3-90) (USACAC)

ART 8.5.20 NEUTRALIZE AN ENEMY FORCE

8-105. Neutralize results in rendering enemy personnel or materiel incapable of interfering with friendly operations. (FM 3-90) (USACAC)

ART 8.5.21 OCCUPY AN AREA

8-106. Occupy involves moving a force into an area so that it can control the entire area. Both the movement to and occupation of the area occurs without opposition. (FM 3-90) (USACAC)

ART 8.5.22 REDUCE AN ENCIRCLED/BYPASSED ENEMY FORCE

8-107. Reduce involves the destruction of an encircled or bypassed enemy force. (FM 3-90) (USACAC)

ART 8.5.23 RETAIN A TERRAIN FEATURE

8-108. Retain is when the commander ensures a terrain feature already controlled by a friendly force remains free of enemy occupation or use. (FM 3-90) (USACAC)

ART 8.5.24 SECURE A UNIT/FACILITY/LOCATION

8-109. Secure involves preventing the enemy from damaging or destroying a unit, facility, or geographical location. (FM 3-90) (USACAC)

ART 8.5.25 SEIZE AN AREA

8-110. Seize involves taking possession of an area using overwhelming force. (FM 3-90) (USACAC)

ART 8.5.26 SUPPORT BY FIRE THE MANEUVER OF ANOTHER FRIENDLY FORCE

8-111. Support by fire is when a maneuver force moves to a position where it can engage the enemy by direct fire to support another maneuvering force. (FM 3-90) (USACAC)

ART 8.5.27 SUPPRESS A FORCE/WEAPON SYSTEM

8-112. Suppression results in the temporary degradation of the performance of a force or weapon system below the level needed to accomplish its mission. (FM 3-90) (USACAC)

ART 8.5.28 TURN AN ENEMY FORCE

8-113. Turn involves forcing an enemy force to move from one avenue of approach or movement corridor to another. (FM 3-90) (USACAC)

ART 8.5.29 CONDUCT COMBAT SEARCH AND RESCUE

8-114. Locate and extract distressed personnel (military, civilian, or foreign nationals) and sensitive equipment from enemy controlled or contested areas during wartime or contingency operations to prevent capture. This task includes peacetime search and rescue and the conduct of unconventional assisted recovery. (FM 100-25) (USAJFKSWCS)

ART 8.5.30 CONDUCT CONSOLIDATION AND REORGANIZATION ACTIVITIES

8-115. After the end of a tactical mission, the unit involved reorganizes itself. It determines the extent of losses; redistributes personnel, supplies, and equipment; reestablishes an effective chain of command; and establishes tactically viable defensive positions. (FM 3-90) (USACAC)

ART 8.5.31 RECONSTITUTE TACTICAL FORCES

8-116. Take action to return a unit to an acceptable level of combat power based on the unit mission and available resources. Reconstitution transcends normal day-to-day sustainment activities and consists of two categories—reorganization and regeneration. (FM 100-9) (CASCOM)

ART 8.5.31.1 Reorganize Units as Part of a Reconstitution Effort

8-117. Shift internal resources within a degraded unit to increase its overall level of combat effectiveness. Cross-level equipment and personnel, match operational weapons systems with crews, and form composite units (by joining two or more attrited units to form a single full-strength or overstrength unit) as necessary. (FM 100-9) (CASCOM)

ART 8.5.31.2 Regenerate Units and Organizations as Part of a Reconstitution Effort

8-118. Rebuild a subordinate unit through replacement of small units (crew to company), including leaders and equipment; large-scale replacement of personnel, equipment, and supplies; reestablishment or replacement of essential C2; and conducting mission essential training for the newly rebuilt unit. Regeneration usually requires moving the unit to a secure area. (FM 100-9) (CASCOM)

ART 8.5.31.3 Conduct Weapon System Replacement Operations

8-119. Provide fully operational replacement weapons systems. Weapon system replacement operations include producing a ready-to-fight weapon system by linking up a ready-for-issue weapon system with the necessary

ammunition, crew, ranges, and time. It also includes moving and integrating ready-to-fight weapons systems into new organizations. (FM 100-9) (CASCOM)

Glossary

AAFES	Army and Air Force Exchange Service
AAR	after action review
ABCS	Army Battle Command System
A/DACG	Arrival/Departure Airfield Control Group
AO	area of operations
AOI	area of interest
APOD	aerial port of debarkation
APOE	aerial port of embarkation
ART	Army tactical task
ARTEP	Army Training and Evaluation Program
AUEL	Automated United Equipment List
AUTL	Army Universal Task List
BDA	battle damage assessment
BOS	Battlefield Operating System
CADD	Combined Arms Doctrine Directorate
CASCOM-DPMO	Combined Arms Support Command—Deployment Process Modernization Office
C2	Command and Control
CBRNE	chemical, biological, radiological, nuclear, and enhanced high explosives
CCIR	Commander's Critical Information Requirement
CI	counterintelligence
CID	Criminal Investigation Command
CJCSM	Chairman, Joint Chiefs of Staff Memorandum
CMO	civil-military operations
CNA	computer network attack
COA	course of action
COMSEC	communications security
CONUS	Continental United States
COP	common operational picture
COSC	Combat Operational Stress Control
CP	command post

CROP	container roll-out platform
CSS	Combat Service Support
DA	Department of the Army
DNBI	disease and non-battle injury
DOD	Department of Defense
DOJ	Department of Justice
ECU	environmental conditioning/control units
EEFI	essential elements of friendly information
EMCON	Emission Control
EOD	Explosive Ordnance Disposal
EPW	Enemy Prisoner of War
FARP	forward arming and refueling point
FEMA	Federal Emergency Management Agency
FFIR	Friendly Force Information Requirements
FHPGE	force health protection in a global environment
FM	field manual
FOD	foreign object damage
FRAGO	fragmentary order
GCCS-A	Global Command and Control System—Army
GPW	Geneva Convention Relative to the Treatment of Prisoners of War
HAZMAT	hazardous material
HPT	high-priority target
HR	human relations
HRC	high risk of capture
HSS	health service support
HUMINT	human intelligence
HVT	high-value target
I&W	indications and warnings
IAW	in accordance with
ID	identification
IFF	identification friend or foe
IMINT	image intelligence
INFOCON	information control
Intel	intelligence
IO	information operations

IPB	Intelligence Preparation of the Battlefield
IR	information requirements
ISR	Intelligence, Surveillance, and Reconnaissance
ITV	in-transit visibility
JBPO	Joint Blood Program Office
JFC	Joint Force Commander
JLOTS	Joint Logistics Over the Shore
JOA	Joint Operations Area
JOPES	Joint Operation Planning and Execution System
JSROI	Joint Reception, Staging, Onward Movement, and Integration
kph	kilometers per hour
KS	Kansas
LAAWS	Legal Automation Army-Wide System
LNO	liaison officer
LOADEX	loadout exercise
LOC	line of communication
LOGPAC	logistics package
LOW	law of war
LTIOV	latest time information is of value
MASINT	Measurement and Signals Intelligence
M/CM/S	mobility/countermobility/survivability
MCWP	United States Marine Corps Warfighting Publication
MDMP	Military Decision Making Process
METL	mission essential task list
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, and civil considerations
MH	mental health
MHE	materiel handling equipment
MOPP	mission oriented protective posture
MPI	military police investigation
MSD	minimum safe distance
MSR	main supply route
MTF	medical treatment facility
MTMC	Military Traffic Management Command

MTP	mission training plan
MWD	military working dog
MWR	Morale, Welfare, and Recreational
NBC	nuclear, biological, and chemical
NGO	nongovernmental organization
OEH	occupational and environmental health
OGA	other government agencies
OPLAN	operations plan
OPM	Office of Personnel Management
OPORD	operations order
OPSEC	operations security
OTS	over the shore
PA	public affairs
PEW	product explanation worksheet
PIR	priority information requirements
PMCS	Preventative Maintenance Checks and Services
PMI	patient movement items
POD	port of debarkation
POE	port of embarkation
POL	petroleum, oil, and lubricants
PSYOPS	psychological operations
QA	quality assurance
QS	quality surveillance
RDD	required delivery date
RFI	request for information
RFID	radio-frequency identification
ROE	rules of engagement
RP	release point
RSO&I	reception, staging, onward movement, and integration
SAEDA	subversion and espionage directed against the Army
SEAD	suppression of enemy air defense
SERE	survival, evasion, resistance, and escape
SIGINT	signals intelligence
SIGSEC	signal security
SIPRNET	Secret Internet Protocol Router Network

SIR	specific information requirements
SOF	special operating forces
SOFA	Status of Forces Agreements
SOI	signal operating instruction
SOP	standing operating procedures
SOR	specific orders and requests
SP	start point
SPOD	seaport of debarkation
STAMIS	Standard Army Maintenance Information System
STANAG	NATO Standardization Agreement
STARC	state area command
STRIKWARN	Strike Warning
TC-ACCIS	Transportation Coordinator's Automated Command and Control Information System
TC-AIMS II	Transportation Coordinator's Automated Information for Movement System II
T&EO	training and evaluation outline
TJAGSA	The Judge Advocate General's School United States Army
TLP	troop leading procedures
TOE	table of organization and equipment
TOT	time on target
TPFDD	time phased force deployment data
TPFDL	time phased force deployment list
TRADOC	US Army Training and Doctrine Command
TTP	tactics, techniques, and procedures
UCMJ	Uniform Code of Military Justice
UJTL	Universal Joint Task List
UMT	unit ministry team
US	United States
USAADASCH	United States Army Air Defense Artillery School
USAAGS	United States Army Adjutant General School
USAARMS	United States Army Armor School
USAAVNC	United States Army Aviation Center
USACAC	United States Army Combined Arms Center
USACHCS	United States Army Chaplain Center and School

USACIDC	United States Army Criminal Investigation Command
USACMLS	United States Army Chemical School
USAES	United States Army Engineer School
USAF	United States Air Force
USAFAS	United States Army Field Artillery School
USAFIS	United States Army Finance School
USAIC&FH	United States Army Intelligence Center and Fort Huachuca
USAIS	United States Army Infantry School
USAJFKSWC	United States Army John Fitzgerald Kennedy Special Warfare Center
USAMEDDC&S	United States Army Medical Department Center and School
USAMPS	United States Army Military Police School
USAOC&S	United States Army Ordnance Centers and School
USAOCPA	United States Army Office of the Chief of Public Affairs
USAPC	United States Army Petroleum Center
USASC	United States Army Safety Center
USASC&FG	United States Army Signal Center and Fort Gordon
USASMDC	United States Army Space and Missile Defense Command
USATRADOC DCS-DOC/ALSA	United States Army Training and Doctrine Command Deputy Chief of Staff for Doctrine, Concepts and Strategy /Air, Land, and Sea Application Center
USC	United States Code
USCG	United States Coast Guard
USMC	United States Marine Corps
USMC-CDC	United State Marine Corps-Combat Developments Command
USMTF	United States Message Text Format
USN	United States Navy
WMD	weapons of mass destruction

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