THESIS

JOINT OPERATION PLANNING AND EXECUTION

by

Betty E. Talley

and

Karen J. Vigneron

March 1992

Thesis Co-Advisors: Dan C. Boger
                          David G. Brown

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ABSTRACT

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I. INTRODUCTION

Planning for the employment of military forces is an inherent responsibility of command. It is performed continuously at all echelons during peace, crisis, war, and during the transition from one to the other. Military planning includes two broad categories of planning; force development and operational planning. Force development planning is planning associated with the creation and maintenance of military capabilities. It is primarily the responsibility of the Military Departments and Services and is conducted within the administrative chain of command that runs from the Secretary of Defense to the Military Departments and Services. (JCS Pub. 5-0, p. I-2)

Joint operational planning is conducted within the operational chain of command that runs from the President to the commanders in chief of the unified and specified commands (CINCs or combatant commanders) and is primarily the responsibility of the Chairman of the Joint Chiefs of Staff (CJCS) and the CINCs. This operational planning includes the preparation of joint operation plans by the combatant commanders, as well as those planning activities that support the preparation of these operation plans by providing strategic direction and integration of the varied
functions of the different Military Departments and Services. (JCS Pub. 5-0, p. I-2)

The focus of this thesis is the process of joint operation planning. Joint operation planning employs a single, integrated process that provides similar policies and procedures whether it is peacetime planning or planning in a crisis or wartime situation. This single, flexible process provides for orderly and coordinated problem solving and decisionmaking within the time available for planning. In its peacetime application, the process is centralized and highly structured to support the thorough and fully coordinated development of complex plans for major contingencies. In crisis, this process is shortened, as necessary, to support the dynamic requirements of changing events. In wartime, the process adapts to accommodate greater decentralization of joint operation planning activities. In all its applications the basic process remains fundamentally unchanged and provides a consistent and logical approach for integrating the activities of the National Command Authority (NCA); Chairman, Joint Chiefs of Staff (CJCS); the Joint Chiefs of Staff (JCS); and the combatant commanders in a coherent planning and execution process to accomplish military objectives. (JCS Pub. 5-0, p. I-14)
There are actually six major systems and one major subsystem used by the Department of Defense (DoD) that affect joint planning and operations:

- National Security Council (NSC) System;
- Planning, Programming, and Budgeting System (PPBS);
- Joint Strategic Planning System (JSPS);
- DoD Acquisition System;
- Worldwide Military Command and Control System (WWMCCS);
- National Military Command System (NMCS); and
- Joint Operation Planning and Execution System (JOPES).

(AFSC Pub. 1,p. 5-2)

In accordance with our intention to focus on the process of planning for joint operations, we will concentrate on the systems which are integral parts of the joint planning process: WWMCCS, NMCS, and JOPES. These systems function to integrate the activities of the entire military planning community through an interoperable joint system that provides for uniform policies, procedures, and reporting structures supported by modern communications and computer systems. This joint system supports the information and intelligence requirements and decisionmaking functions of the NCA, CJCS, and the CINCs. (JCS Pub. 5-0,p. I-14) This thesis will give particular attention to the JOPES system, taking an in-depth look at its objectives and procedures, and the Joint Operation Planning and Execution System Computer-Assisted Instruction (JOPESCAI) simulator.
A. OBJECTIVE OF THE THESIS

There is no one document which describes in concise form the joint operation planning process or provides a detailed narrative of JOPES. The primary research objective of this thesis is to consolidate joint planning and JOPES information in one document to facilitate the understanding of the planning process, the system, and their relationship to one another. JOPES is continually evolving and this thesis will provide a description of the current version of this dynamic system. Also included is a detailed account of the JOPES Computer-Assisted Instruction (JOPESCAI) simulator which introduces the reader to the specifics of JOPES capabilities. Another purpose of the thesis is the development of a user's manual which will facilitate the use of the JOPESCAI simulator and enhance the reader's hands-on experience in the simulated environment. While accomplishing these objectives the role of defense transportation in joint operation planning and execution will be highlighted.

B. STRUCTURE OF THE THESIS

The remaining chapters and appendixes of the thesis are presented as follows: Chapter II is an overview of joint operation planning with a discussion of the major participants and their responsibilities; the principles of joint planning; and the systems involved, including WWMCCS,
NMCS, and JOPES. Chapter III addresses the peacetime joint operation planning process with an explanation of how deliberate planning procedures are used in the development of contingency plans. Chapter IV focuses on the process of crisis action planning, illustrating how the planning process is condensed to meet the time-sensitive demands of emergency situations. Chapter V is an in-depth examination of the Joint Operation Planning and Execution System. It provides a description of the system as it now exists and discusses planned developments. There is an emphasis on the JOPESCAI simulator and user's manual. The new systems and improvement programs which are intended to provide a more efficient and effective joint planning process are reviewed in Chapter VI. Chapter VII is a thesis summary. Appendix A is a glossary of acronyms; Appendix B a glossary of terms which are frequently used in joint operation planning; and Appendix C is the Joint Operation Planning and Execution System Computer-Assisted Instruction User's Manual.

C. METHODOLOGY

The methodology used in the development of this thesis included a review of available literature pertaining to the joint operation planning systems and processes, extensive use of the JOPESCAI simulator to develop a user's manual, and conversations with individuals involved in the
development and use of the Joint Operation Planning and Execution System and the simulator.
II. OVERVIEW OF JOINT OPERATION PLANNING

Joint operation planning refers exclusively to those operational planning activities associated with the preparation of operation plans and orders (other than the Single Integrated Operations Plan or SIOP) for conducting military operations in hostile environments. These joint plans are prepared by the commanders in chief of the unified or specified commands (combatant commanders or CINCs) and other designated component and joint force commanders under the strategic direction of the National Command Authorities (NCA) and the Chairman, Joint Chiefs of Staff (CJCS). (JCS Pub. 5-0, p. I-4)

Joint operation planning includes contingency planning, execution planning, and implementation planning. In peacetime, the planners prepare contingency plans, when directed by the CJCS or to accomplish other missions not specifically assigned by the CJCS but determined by the combatant commander to be necessary. Joint operation plans tasked by the CJCS are reviewed by the Joint Staff and the

---

1 The unified and specified commands are those commands established by the President which have broad and continuing missions. Unified commands are joint commands made up of members from two or more of the Services such as, U.S. Transportation Command (USTRANSCOM). Specified commands are composed of members of a single service, i.e., Forces Command (FORSCOM).
JCS and approved by the CJCS. The approved joint operation plans of the CINCs represent the national plans for major contingencies and transition to war. When directed by the Secretary of Defense, through the Chairman of the Joint Chiefs of Staff, the joint operation plans are converted to joint operation orders and implemented by the CINCs. During crisis situations, the CINCs develop courses of action in response to specific situations or taskings and prepare joint operation orders to execute courses of action approved by the NCA. (JCS Pub. 5-0,p. I-15)

This chapter examines the primary aspects of this joint operation planning. First, it discusses concepts used to categorize plans and planning. The second section is a description of the responsibilities and functions of the major participants in the joint operation planning process. It then discusses the scope, guiding principles, and criteria for joint operation planning. Lastly, there is a review of the systems, WWMCCS, NMCS, and JOPES, which support the joint operation planning and execution process.

A. CATEGORIZATION OF PLANS AND PLANNING

Joint operation plans have many facets and may be devised for many different situations and purposes. Plans and planning can be categorized by type of plan, procedures used for planning, how the commander views his resources, and/or the command perspective. The purpose of this
categorization scheme is to aid in giving structure to the process.

1. Types of Plans

Joint operation plans are prepared under joint procedures and in prescribed formats either as operation plans in complete format (OPLANs) or operation plans in concept format (CONPLANs), as directed by the CJCS or the combatant commander. Either of these plans may be later converted into operation orders (OPORDS) which are the directive to execute the operation plan.

a. Operation Plans in Complete Format (OPLANs)

An OPLAN is a complete and detailed operation plan including a full description of the concept of operations and all annexes applicable to the plan. It identifies the specific forces, functional support, and resources required to execute the plan and provides estimates of final force numbers and scheduling for their movement into the theater. The OPLAN can be used as the basis for quickly developing an operation order. An OPLAN is normally prepared when the contingency is critical to national security and would tax the total resources available for planning, when detailed planning will contribute to deterrence by demonstrating readiness through planning, or when detailed planning is required to support alliance planning. (JCS Pub. 5-0, p. I-21)
b. Operation Plans in Concept Format (CONPLANS)

A CONPLAN is a less detailed documentation of the combatant commander’s plan. It normally does not require detailed calculation of support requirements and strategic movements. Thus, the CONPLAN needs considerable expansion to convert into an OPORD. Preparation of a CONPLAN occurs when the contingency is not crucial to national security and will not place unacceptable demands on available resources, when the probability of occurrence of the possible contingency during the planning cycle is low, or when greater flexibility through planning for a wider range of contingencies is desired. (JCS Pub. 5-0,p. I-21)

2. Deliberate or Crisis Action Planning

The amount of time available significantly influences the planning process and determines whether the planning will be conducted using peacetime deliberate planning or crisis action procedures. (AFSC Pub. 1,p. 6-3)

a. Deliberate Planning

Deliberate or peacetime planning is the process used when time permits the total participation of the commanders and staffs of the Joint Planning and Execution Community (JPEC). It is used to develop joint operation plans for contingencies identified in strategic planning documents. The deliberate planning process is highly structured. The development of the plan, coordination among
the supporting commanders, reviews by the Joint Staff, and communications between the members of the JPEC may take as long as two years. (AFSC Pub. 1, p. 6-3)

b. Crisis Action Planning

Time sensitive or crisis action planning is conducted during times of crises or war. The overall process of time sensitive planning parallels that of deliberate planning, but is a more flexible system that responds more quickly to the demands of changing events. The procedures allow for a logical, rapid flow of information; timely preparation of executable courses of action; and communication of the decisions of the NCA to the combatant commander. (AFSC Pub. 1, p. 6-3)

The processes of deliberate and crisis action planning will be discussed in detail in Chapter III and Chapter IV. The Joint Operation Planning and Execution System (JOPES) which provides structure and automated data processing (ADP) support for both types of planning will be covered in Chapter V.

3. Views of Resources

How a plan is developed will depend, to a great extent, on how the commander views his resources, whether he sees the plan driving resources or the resources driving the plan.
a. Requirements Planning

Requirements planning focuses on the CINC's analysis of the enemy threat or his assigned task. The plan developed in response to the threat or tasking determines the level of forces and support needed to accomplish his mission. These required forces may be more than the level of available resources. (AFSC Pub. 1, p. 6-3)

b. Capabilities Planning

On the other hand, capabilities planning attempts to meet the threat based on the forces and support that have been funded by Congress in the current budget cycle. The course of action may be constrained by the available resources or political and diplomatic considerations. The JPEC is moving toward capabilities planning. Work is progressing on creating contingency plans based on available supplies which ensures the validity and utility of the resulting plans. (AFSC Pub. 1, p. 6-3)

The resources dedicated to sets of multiple plans that are intended for concurrent execution are limited to total availability and will be distributed within and among the individual plans to prevent duplication and conflict. (AFSC Pub. 1, p. 6-4)

4. Command Perspective

Still another way to characterize planning focuses on the command perspective in planning. The command
perspective greatly influences both the choice of the course of action and the resources made available for planning. For instance, strategic planning for simultaneous execution of a number of OPLANS outweighs the regional perspective of any single commander. Likewise, functional planning has to be subordinated to the supported CINC’s concepts for the entire theater of operations. (AFSC Pub. 1,p. 6-4)

a. Global Plans

Global plans are joint operation plans prepared by a combatant commander at the direction of the CJCS and designed for execution concurrently with plans prepared by other CINCs in response to contingencies that extend beyond the area of responsibility of a single combatant commander. (JCS Pub. 5-0,p. I-18)

b. Regional Plans

Regional plans are joint operation plans prepared by a CINC for contingencies that are not expected to extend beyond his area of responsibility. They are prepared in response to taskings from the CJCS or at the CINC’s own initiative. (JCS Pub. 5-0,p. I-18)

c. Functional Plans

Functional plans are joint operation plans developed by combatant commanders with functional responsibilities, i.e., U.S. Space Command (USSPACECOM), U.S. Special Operations Command (USSOCOM), and U.S.
Transportation Command (USTRANSCOM), and the Service component commanders, etc. They view their planning problem as not being limited by geography. For instance, each Service subordinate component concentrates on the planning for its Service's entire contribution to the supported combatant commander's concept of operation. (AFSC Pub. 1,p. 6-4) These functional plans may be tasked by CJCS or developed at the initiative of the CINC. They may be part of a global set of plans or focused independently on the functional area of responsibility of the preparing CINC. (JCS Pub. 5-0,p. I-19)

B. PLANNING ORGANIZATION

Planning organization is accomplished in two ways. First, the national structure is a permanently established hierarchy of individuals and organizations with continuing responsibilities and relationships. Second, for planning and execution purposes, commands and agencies are organized into supported and supporting commands. (JCS Pub. 5-0,p. I-26) Each entity has specific responsibilities within the planning and execution process.

1. National Structure

   a. National Command Authorities (NCA)

      The National Command Authorities (NCA) are the President and the Secretary of Defense or their duly authorized alternates or successors. They alone are vested
with the lawful authority to direct the Armed Forces in the
elevation of military action, including the movement of
forces or the initiation of operations. The ultimate
authority for national defense rests with the President. He
is assisted by the National Security Council (NSC), which is
the principal developer of national security policy. The
Secretary of Defense is the President’s primary advisor for
all matters relating to the Department of Defense and is a
member of the NSC. In peacetime, the Secretary of Defense
issues policy guidance for contingency planning and reviews
contingency plans with the assistance of the Under Secretary
of Defense for Policy. In crisis and war, the Secretary
plays a pivotal role in crisis action planning and
execution. (JCS Pub. 5-0,p. I-26)

b. Joint Planning and Execution Community (JPEC)

The Joint Planning and Execution Community
(JPEC) is comprised of the CJCS, the JCS, the Joint Staff,
the Services and certain Service major commands and their
Service component commands, the unified and specified
combatant commands and their component commands, joint task
forces (if established), the Defense Logistics Agency (DLA),
and other Defense agencies as may be appropriate to a given
scenario. Thus, JPEC is a collective term which denotes the
headquarters, commands, and agencies involved in planning
for the mobilization, training, preparation, movement,
reception, employment, support, and sustainment of forces assigned or committed to a theater of war or theater of operations. (JCS Pub. 5-0, p. I-27)

(1) Chairman, Joint Chiefs of Staff. The CJCS, in consultation with the JCS and assisted by the Joint Staff, manages the joint operation planning process. In peacetime, he assigns planning tasks and resources, establishes planning relationships (i.e., supported and supporting commands), and approves joint operation plans. In crisis and war, the Chairman is responsible for the development of strategic options and courses of action, resolves conflicts in resources, provides recommendations and risk assessments to the NCA, conveys NCA decisions to the CINCs, and monitors the deployment and employment of forces. (JCS Pub. 5-0, p. I-28)

(2) Services. The Services organize, train, and equip forces to perform in the joint environment for assignment to the combatant commanders. They are then responsible for the maintenance of these assigned forces. The Services also maintain mobile forces for allocation in emergencies and plan for the expansion of capabilities in time of war. For joint operation planning, the Services make recommendations regarding the apportionment of forces and resources to the combatant commanders and, upon approval, identify the actual forces and support to be
employed in the joint operation plan prepared by the CINCs. They also prepare detailed plans to support joint sustainment and mobility plans and provide integrated mobilization information to the JCS. (JCS Pub. 5-0, p. I-28)

(3) Combatant Commands. As stated previously, the combatant commanders are the commanders in chief (CINCs) of the unified and specified commands, i.e., USCINCCENT, USCINCPAC, etc. In the joint planning process the CINCs of the unified and specified commands are principally responsible for the preparation and implementation of joint operation plans. During peacetime deliberate planning, they participate in the development of national military strategy, develop theater strategies and campaign plans, and prepare implementation plans for contingencies. During crisis, they recommend courses of action, expand and refine existing plans or develop new plans, and conduct joint operations. In war, combatant commanders plan and conduct campaigns. (JCS Pub. 5-0, p. I-29)

(4) Service Component Commands. The component commands such as the Naval Special Warfare Command (NAVSPEWAR), the Army’s Military Traffic Management Command (MTMC), the Air Force’s Military Airlift Command (MAC), and the Navy’s Military Sealift Command (MSC), etc., perform joint planning functions in both the operational and Service chains of command. Within the operational chain, they
recommend the proper force composition and employment of Service forces, provide Service force and support information for joint planning, and prepare component-level operation plans in support of missions assigned to the combatant commander. Within the Service chain, they prepare and execute administrative and logistic plans for the support of their operating forces. (JCS Pub. 5-0, p. I-30)

(5) Subordinate Joint Commands. Subordinate joint commands, such as U.S. Forces Japan (USJAPAN) or U.S. Forces Caribbean (USFORCARI), etc., and joint task forces, such as JTF-140 (when they are established), perform joint planning functions similar to those of the combatant commands for designated areas of responsibility or specific missions. Such functions are accomplished under the direction of the authority that established the subordinate command. (JCS Pub. 5-0, p. I-30)

2. Supported and Supporting Commanders

For joint operation planning the CJCS organizes the JPEC into supporting relationships. A supported commander is identified for each planning task and supporting commanders are designated as appropriate. Whether a command is designated as being the supported command or a supporting command is dependent upon the contingency. A supported commander in one contingency may function as a supporting commander in another. This process provides for unity of
command in the planning and execution of joint operations and facilitates unity of effort within the JPEC. (JCS Pub. 5-0,p. I-31)

a. **Supported Commanders**

A supported commander has primary responsibility for all aspects of a specified contingency or crisis. He is normally the CINC within whose geographic area the contingency is expected or the crisis actually occurs, i.e., Commander in Chief, U.S. Pacific Command (USCINCPAC); Commander in Chief, U.S. Central Command (USCINCCENT); etc. Supported commanders prepare joint operation plans in response to tasks assigned by the CJCS. Multiple supported commanders may be designated for global planning in order to prepare for contingencies that are expected to occur concurrently. Under these circumstances, a commander may be a supported commander while simultaneously supporting another within the context of a single global contingency. Similarly, one commander may be tasked to support multiple supported commanders simultaneously. (JCS Pub. 5-0,p. I-31)

b. **Supporting Commanders**

Supporting commanders provide augmentation forces or other support to a designated supported commander or commanders. Such support may include the preparation of plans supporting the joint operation plan of the supported commander. For example, USTRANSCOM performs unique
supporting functions in support of the other combatant commands. USTRANSCOM and its Transportation Component Commands (TCCs), MAC, MSC, and MTMC, plan and execute the transportation aspects of worldwide strategic mobility operations, integrate deployment-related ADP systems such as the Global Transportation Network (GTN) and provide centralized wartime traffic management. (JCS Pub. 5-0,p. I-32)

C. SCOPE OF JOINT PLANNING

Joint operation planning encompasses planning for the full range of activities required for conducting joint operations. These activities include the mobilization, deployment, employment, and sustainment of forces. Each requires special planning consideration. A comprehensive joint operation plan includes planning for each of these endeavors. (JCS Pub. 5-0,p. I-16)

1. Mobilization Planning

Mobilization is the process of systematically and selectively moving from a normal state of peacetime preparedness to an appropriate warfighting posture. Mobilization may range from manpower augmentation of the active force to widespread involvement of the nation’s economic, political and industrial resources. (JCS Pub. 5-0,p. II-20)
Mobilization planning is directed toward assembling and organizing these national resources to support national objectives in times of war or other contingencies. It plans for bringing all or part of the Armed Forces to the necessary state of readiness to meet the requirements of the specific contingency. This may include planning for the activation of all or part of the Reserve components as well as assembling and organizing personnel, supplies, and materiel. (JCS Pub. 5-0, p. I-16)

2. Deployment Planning

Deployment planning is operational planning directed toward the relocation of forces and sustainment resources from an original location to a specific area of operations for conducting the joint operations contemplated in a given plan. It involves planning for the intra-CONUS, intratheater, and intertheater movement of forces and the resources to sustain them. (JCS Pub. 5-0, p. I-16)

3. Employment Planning

Employment planning relates to the strategic or tactical use of forces in an area of operations. It defines how existing and projected capabilities will be used to attain specified military objectives. Employment planning involves all the traditional military actions required to pursue warfare successfully: evaluating enemy actions and capabilities, devising and selecting courses of action.
(COAs), positioning forces and resources, and conducting operations. Employment planning thus provides the foundation and determines the scope for mobilization, deployment and sustainment planning. (JCS Pub. 5-0, p. II-25)

4. Sustainment Planning

Sustainment planning is directed toward providing and maintaining levels of force, materiel, and consumables required to maintain and prolong operations or combat until successful accomplishment, or revision of the mission or national objective. (JCS Pub. 5-0, p. I-17)

D. PRINCIPLES

There are four major principles which serve to guide planning for the employment of joint forces. To be optimal, the joint operation plan must be objective, increase unity of effort, have flexibility, and be timely.

1. Objective

Joint operation planning is directed toward clearly defined, attainable and decisive objectives. Accomplishment of assigned or implied missions is the preeminent purpose of all operational planning. (JCS Pub. 5-0, p. I-10)

2. Unity of Effort

Joint operation planning seeks to integrate the efforts of all components of the Armed Forces and agencies of the Department of Defense in the attainment of common objectives. This unity of effort in joint operation
planning is achieved by planning under unified direction, by clearly delineating planning responsibilities and relationships, and by establishing common doctrine and procedures for the planning process. Interoperability supports unity of effort and is reinforced in the planning process through the use of JOPES and the preparation of joint plans. Coordination, cooperation, and mutual trust further facilitate unity of effort. (JCS Pub. 5-0, p. I-11)

3. Flexibility

Flexibility enhances the utility of operation plans. Joint operation planning, therefore, strives to preserve the flexibility to adapt to uncertainties and change at, and during, implementation. Planning prepares for and accommodates the potentially conflicting requirements of trying to deter conflict while simultaneously preparing for war. Planning provides the basis for an effective transition from peace to war as information and intelligence are compiled, uncertainties are resolved, and objectives refined. Joint operation plans provide for flexibility in execution by delegating authority, to the maximum extent consistent with control, to promote freedom of action by subordinates. This is imperative if force effectiveness is to continue when command and control is disrupted. (JCS Pub. 5-0, p. I-12)
4. **Timeliness**

Joint operation planning must be responsive within the time available for planning which varies with the circumstances and the purpose of the planning. The joint operation planning process adjusts to these variations and enables the development of joint operation plans and orders within the time dictated by the situation. During peacetime, the process produces fully coordinated contingency plans for military operations. In crisis or war, the process supports the determination of strategy, the development and selection of feasible courses of action, and planning for execution as rapidly as the situation requires. (JCS Pub. 5-0, p. I-12)

**E. CRITERIA**

Joint operation plans are developed in conformance with the criteria of adequacy, feasibility, and acceptability. These criteria are utilized by the Joint Staff and JCS in reviewing joint operation plans prior to approval.

1. **Adequacy**

Adequate plans provide for the accomplishment of the mission when the plans are executed successfully. They are sufficient in scope and concept of operations to accomplish assigned tasks. Adequate plans comply with tasking assignments and guidance, and contain only valid and necessary assumptions. (JCS Pub. 5-0, p. I-24)
2. **Feasibility**

Feasible plans accomplish assigned tasks with resources that are available within the time-frames contemplated by the plan. They ensure full and appropriate utilization of available capabilities and resources. (JCS Pub. 5-0, p. I-25)

3. **Acceptability**

Acceptable plans are proportional to the requirements and are worth the expected cost. They provide for accomplishment of the mission with available resources without incurring excessive losses in personnel, equipment, materiel, time, or position. They are consistent with established ethical standards, the laws of war, and are politically supportable. (JCS Pub. 5-0, p. I-25)

**F. SYSTEMS**

Three of the major supporting systems of the joint operation planning and execution effort are the Worldwide Military Command and Control System, the National Military Command System, and the Joint Operation Planning and Execution System. These national-level systems function to integrate the JPEC in unified effort for joint operation planning and execution. (JCS Pub. 5-0, p. II-10)
1. Worldwide Military Command and Control System (WWMCCS)

The Worldwide Military Command and Control System (WWMCCS) system provides the means for operational direction and technical administrative support involved in the command and control of U.S. military forces (AFSC Pub. 1, p. 5-19). It supports both operational planning and implementation efforts (JCS Pub. 5-0, p. I-10).

The system furnishes a multipath channel for secure communications to transmit tactical warning and intelligence information to the President and Secretary of Defense, and is the channel used by them to give direction to U.S. Combatant Commanders. The goal of WWMCCS is to establish effective connectivity among the members of the defense organization. (AFSC Pub. 1, p. 5-19)

The Worldwide Military Command and Control System consists of:

- the National Military Command System (NMCS);
- the command and control systems of the unified and specified commands;
- the WWMCCS-related management/information systems of the headquarters of the military departments;
- the command and control systems of the headquarters of the Service component commands; and
- the command and control support systems of DoD agencies. (AFSC Pub. 1, p. 5-19)

The basic function of WWMCCS is transferring information. The flow of information is enhanced by
formalized reporting structures and by standard, compatible ADP command, control, and communications (C3) systems. These components are connected in a network of reporting systems and data bases. The ADP system supports four basic functional areas: resource and unit monitoring, conventional planning and execution, nuclear planning and execution, and tactical warning/attack assessment intelligence. (JCS Pub. 5-0,p. II-10)

Support of the national-level command and control function is the primary mission of WWMCCS. The system is available to support combatant commanders in their command and control responsibilities on a noninterference basis. (AFSC Pub. 1,p. 5-20)

The five basic elements of WWMCCS are:

- **Warning systems** that notify operation command centers of the occurrence of a threatening event.

- **WWMCCS Communications** include the general- and special-purpose communications capabilities to convey information, hold conferences, and issue orders.

- **Data Collection and Processing** is the collection and handling of data to support information requirements of WWMCCS.

- **Executive Aids** are the WWMCCS related documents, procedures, reporting structure, and system interaction, that permit the user to connect with the system, and receive output records, forms, and displays.

- **WWMCCS Command Facilities** are the primary or alternate command centers.

Each of these five elements extends through the various levels of command and control. The operation of the WWMCCS
elements together forms a worldwide information system.
(AFSC Pub. 1, p. 5-20)

The users of the system may access WWMCCS programs through a visual information projection (VIP) terminal, a WWMCCS Information System (WIS) Common User Contract (CUC) such as the IBM-PC/XT, or the newly acquired Honeywell/Macintosh WIS Workstation. These terminals and workstations are connected to one of the many Honeywell H6000 computers that, since 1973, have been the standard ADP support for joint operation planning and execution. (AFSC Pub. 1, p. 5-21)

The Worldwide Military Command and Control System is not a single system, nor are there plans for it to become one. It is a system of systems that range from the national to the theater level. Some of the component systems are WWMCCS-unique, but most are designed, developed, purchased, and used to satisfy the command and control requirements of the Services or commands that normally use them. Also, WWMCCS is not a closed system as illustrated in Figure 2-1. This figure illustrates the system’s contacts with other non-WWMCCS systems (for example, the Presidential Command and Control System), non-DoD agency systems, and tactical command and control systems that support subordinate military Service units. (AFSC Pub. 1, p. 5-22)

With the WWMCCS Intercomputer Network (WIN), users can communicate with other users, review and update data at
Figure 2-1  Worldwide Military Command and Control System Relationships

Source: AFSC Publication 1
other WWMCCS sites, and transfer data accurately and rapidly between computers. The land line and satellite connections permit real-time Top Secret communications. These network capabilities include the Telecommunication Network (TELNET), File Transfer Service (FTS), and WIN Teleconference (TLCF). (AFSC Pub. 1,p. 5-23)

The Telecommunications Network is used to establish remote access to computer resources of another remote host in the network; that is, with proper permissions, users can log on to a WWMCCS remote host computer site as if the terminal were connected to their site. By using this capability, a planner can access computers and programs at other locations, review and produce printouts of the database, and (with permission) modify the database. (AFSC Pub. 1,p. 5-23)

The File Transfer Service is used to exchange large volumes of data; for example, entire Time-Phased Force and Deployment Data (TPFDD) files can be passed between members of the JPEC. The FTS is also used for the transfer of WIN mail and to send and receive messages. (AFSC Pub. 1,p. 5-23)

The WIN Teleconference permits up to 80 interconnected WWMCCS sites to confer and exchange textual information simultaneously. The 80 sites can accommodate 250 users simultaneously. This particular capability does allow terminal-to-terminal communications but does not update the database. (AFSC Pub. 1,p. 5-24)
2. National Military Command System (NMCS)

The National Military Command System (NMCS) is the component of the Worldwide Military Command and Control System that supports the NCA in the exercise of their military command responsibilities. It is a responsive, reliable and survivable system that relays the warning and intelligence that permit accurate and timely decisions. (AFSC Pub. 1,p. 5-24)

The NMCS includes the National Military Command Center (NMCC), the Alternate National Military Command Center (ANMCC), and the National Emergency Airborne Command Post (NEACP), and other command centers designated by the Secretary of Defense. It also includes the communications connecting the command centers of the headquarters of the combatant commanders, Service headquarters, and other commands and agencies. (AFSC Pub. 1,p. 5-24)

Coordination and liaison are established and maintained with activities outside the DoD that have functions associated with the NMCS, for example, White House Situation Room, CIA Operations Center, U.S. Coast Guard Operations Center, etc. Military information is exchanged with these organizations through timely, secure, and reliable communications systems. In addition, political, intelligence, diplomatic, and economic information are received from these sources. CJCS is responsible for the
coordination with the activities outside the Department of Defense. (AFSC Pub. 1, p. 5-24)

3. Joint Operation Planning and Execution System (JOPES)

The Joint Operation Planning and Execution System (JOPES) is the DoD approved system for conventional operation planning and execution. JOPES consists of policies, procedures, reporting structures, and personnel, supported by C3 systems. It supports and integrates joint operation planning activities at the national, theater, and supporting command levels and interrelates with three other national systems: the National Security Command System (NSCS), the Joint Strategic Planning System (JSPS), and the Planning, Programming, and Budgeting System (PPBS). The Joint Operation Planning and Execution System is the principal DoD system for translating policy decisions into operation plans and orders in support of national security objectives. It also provides joint operational requirements to the PPBS for use in making national resource decisions that affect the PPBS and JSPS. (JCS Pub. 5-0, p. III-2)

JOPES is a dynamic system, continually evolving through the integration and enhancement of two earlier systems: the Joint Operation Planning System (JOPS) which supported deliberate peacetime planning and the Joint Deployment System (JDS) which supported crisis action.
planning. This new system now provides support for both types of planning in a single integrated system. (JCS Pub. 5-0, p. III-3)

The Joint Operation Planning and Execution System is a planning and execution tool. It does not cause events to happen. It does provide senior-level decisionmakers with the means to monitor, analyze, and control events during the planning and implementing of joint operations. (JOPES Concept of Operations, p. 7) These capabilities will be discussed in detail in Chapter V.
III. THE DELIBERATE PLANNING PROCESS

In order to select the best means of performing military missions, the staff of a combatant command must consider many factors in its planning for joint operations. The planning process is complex, and out of necessity, must be orderly and thorough.

While studying the joint planning process, the difference between process and procedures should be kept in mind. The process is a particular method of planning for joint operations that involves a number of steps or operations. It is the planning activity from receipt of the tasking from the CJCS to the preparation of supporting plans by subordinate and supporting commanders. The procedures are the individual, often interrelated steps or actions that are performed to produce the plan. The joint planning process with its individual procedures for peacetime deliberate planning is the focus of this chapter. Unless otherwise noted, all the information in the chapter was drawn from Armed Forces Staff College Publication 1. Joint Staff Officer's Guide, 1991.

As stated in the previous chapter, the particular procedures we use in joint planning depend on the time available to accomplish them. When time is not a critical factor, we use deliberate planning. When the time available
for planning is short and the near-term result is expected to be an actual deployment and/or employment of armed forces, the planner uses crisis action planning. Each consists of the same basic steps:

- receive and analyze the task to be accomplished;
- review the enemy situation and begin to collect necessary intelligence;
- develop and compare alternative courses of action;
- select the best alternative;
- develop and get approval for its concept;
- prepare a plan; and
- document the plan.

Although the basic process for planning and executing joint operations is applicable to peacetime, crisis, and war, the formal planning and execution system emphasizes contingency planning for deterrence and effective transition to war. The system focuses on the deliberate preparation of contingency plans in the form of CONPLANs or OPLANs by the combatant commanders in response to strategic direction from the NCA and the CJCS and in conjunction with other DoD planning cycles. Taken together, the CINC-prepared and CJCS-approved joint operation plans constitute the national plan for military response to the full spectrum of identified potential threats. The joint planning and execution process provides the means to respond to emerging crisis situations or transition to war through rapid, coordinated,
time-sensitive execution planning and implementation. In wartime, the focus of the planning and execution system adapts to the defined demands of the conflict at hand. (JCS Pub. 5-0, pp. III-1--III-2)

To draw from the many categories identified in Chapter II for categorizing joint plans and planning, this chapter describes the planning procedures for:

- developing a plan of **military action** in a **hostile environment**;
- prepared by a CINC with a **regional perspective**;
- by a staff in **peacetime conditions** when combat action is not imminent;
- using currently available U.S. **capabilities** measured in armed forces, transportation, and supplies; and
- emphasizing the **strategic deployment** of those forces, equipment, and supplies based on the CINC's concept of operations.

In the planning process, automatic data processing support is essential in this laborious task of:

- creating and maintaining a database of the many available types of combat and support units;
- describing the units in terms of numbers of passengers and weight and volume of cargo;
- calculating the vast quantities of specific sustaining supplies needed in each of the various phases of hostile action; and
- simulating the movement of troops and support from their current location to the point of employment in the theater of operations.

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JOPES and WWMCCS are the primary means of this ADP support and are included here as an integral part of the planning process.

The remainder of the chapter describes the players and phases of the deliberate planning process.

A. THE PLAYERS IN THE DELIBERATE PLANNING PROCESS

The process of planning a joint operation begins with the national strategy stated by the President. It is supported with the funding of resources by Congress and is defined by the task assignments published by the CJCS. Players in this planning process are presented in Figure 3-1. They include the NCA and their advisors, supporting executive agencies, and the Joint Planning and Execution Community (JPEC).

Civilian leadership tops the pyramid. The ultimate decision on national policy, detailed development of resource levels, and overall strategic direction of the Armed Forces is given by the President and Secretary of Defense, the National Command Authorities. The NCA are supported by the executive departments, i.e., Defense Intelligence Agency, National Security Agency, and Defense Logistics Agency. All these executive-level organizations have a role to play in the preliminary direction of contingency operations and approval of the final plans.
Figure 3-1  Players in the Deliberate Planning Process

Source: AFSC Publication 1

*Note: JOPES has been substituted for JOPS/JDS at the base of the pyramid to reflect current capabilities.
Lower in the pyramid are the CJCS and the Joint Staff, who publish the task-assigning documents, review the products of the process, and approve the final version of the peacetime OPLAN. The supported command and its subordinates are the commands principally responsible for developing the contingency plan and, ultimately, executing it. The Services and their logistics agencies play key support roles within the community. By law, it is the responsibility of the Services to recruit, organize, supply equip, train, and maintain forces for the combatant commands. USTRANSCOM is shown separately as a supporting player in the JPEC because of its responsibilities in developing the plan, simulating the movement of resources to assess feasibility, and finally executing the transportation schedule. The last entry on the figure is titled "Supporting Commands;" it represents all the combatant commands that supply resources to the supported command. The specific supporting commands will vary with the contingency.

The secretary of each of the military components is responsible for the efficiency of that Service and its preparedness for military operations. Each has a Service-unique planning system. Given strategic guidance in JCS documents and program and budget guidance sent through department channels, the military Service chiefs have developed a series of documents that support, direct, and
guide Service component commanders. The Service component commanders support the operational needs of the CINCs to the extent that their own Services can support them. The components attempt to strike the proper balance between requirements planning and capabilities planning.

The Joint Operation Planning and Execution System (JOPES) at the base of the pyramid provides structure and support throughout the planning community. JOPES is comprehensive enough to aid in preparing a thorough concept of military operations and is automated enough to handle enormous quantities of data. With its modern simulation tools we can be reasonably assured that a plan will work as expected.

**B. SUMMARY OF THE DELIBERATE PLANNING PROCESS**

Deliberate planning is performed in cycles which support and complement other planning cycles in DoD. The deliberate planning cycle begins with the publication of the Joint Strategic Capabilities Plan (JSCP) and terminates at the end of the period to which the JSCP applies. In coordination with the JPEC, the Joint Staff develops and issues a planning schedule that coordinates plan development activities and establishes submission dates for joint operation plans. (JCS Pub. 5-0, p. III-4)

The JSCP issued by the CJCS performs several functions. Primarily it makes the planning assignment, apportions the
major combat forces available for planning and specifies the product document, i.e., CONPLAN or OPLAN. Thus the CINC is provided with information on the scope of the plan, its format, and the amount of detail that must go into its preparation.

To fulfill the CJCS tasking requirements issued in the JSCP, deliberate joint operation planning is accomplished within a structure of five phases. They are:

- Initiation Phase
- Concept Development Phase
- Plan Development Phase
- Plan Review Phase
- Supporting Plan Phase

These five phases of the deliberate planning process begin when a commander receives a task assignment and end when supporting plans have been approved by the supported commander. However, from the supported commander's point of view, deliberate planning is never complete. It requires regular updating of plan information to ensure that it is ready for execution; some large plans have planners continuously updating elements of information. In fact, the plan is with the CINC until the plan task assignment is revised and the plan altered to meet new conditions, the plan is canceled because it no longer applies, or the plan, or an element of it, is implemented.
In the initiation phase, planning tasks are assigned, major combat forces and strategic transportation assets are apportioned for planning, and the groundwork is laid for planning to begin.

During the concept development phase, several items are completed. In response to the task assignment, the supported commander first determines a mission statement and then develops a concept of operations that is submitted to CJCS for review and approval. This concept of operations is a broad outline of a commander's assumptions or intent regarding the operation or series of operations. It is designed to give an overall picture of the operation. (JCS Pub. 5-0, p. xvi--xvii)

In this phase, planning guidance is issued to the CINC's staff and information on the enemy is collected and analyzed. Using this information, the staff proposes and analyzes tentative courses of action (COAs), the CINC selects the best COA, and the staff develops and documents a concept of operations in either CONPLAN or OPLAN format. By the authority of the CJCS, the Joint Staff reviews the concept and it is approved by the Joint Chiefs of Staff. If the final product is a CONPLAN this is the final review. If it is an OPLAN the concept is returned to the combatant commander for further planning.

In the plan development phase the combatant commander's staff and the staffs of the Service components develop a
detailed transportation-feasible flow of resources into the theater to support the CINC's concept of operations. The information that is required for the plan concerning the combat and support units along with the equipment and supply support, is collected in the Time-phased Force and Deployment Data File (TPFDD). Figure 3-2 illustrates the activities of the plan development phase: determine the forces and cargo required; describe them in logistics terms of numbers, volume, and weight; computer simulate the move using apportioned lift resources; and finally, confirm that the OPLAN is transportation feasible with the available resources and transportation schedules. This phase ends when the fully documented OPLAN, including the TPFDD, is forwarded to CJCS for review and approval.

The plan review phase is a formal part of the deliberate planning process. However, even before this phase begins, the OPLAN has already received a concept review. At this point, all the elements of the plan are submitted to the CJCS for review of the concept for adequacy, feasibility, and acceptability.

Each subordinate and supporting commander who is assigned a task in the CINC's plan prepares a supporting plan during the supporting plan phase. The supporting commander submits these plans to the supported combatant commander for review and approval. The deliberate planning process is not complete until the employment plans and the
Figure 3-2 The Strategic Transportation Problem

Source: AFSC Publication 1
supporting deployment plans are complete; only then is the combatant commander's plan ready to be implemented.

In the following section each of these phases will be discussed in detail.

C. PHASES OF DELIBERATE PLANNING

1. Initiation Phase

The initiation phase is primarily the task assigning phase of deliberate planning. It begins with the issuing of the Joint Strategic Capabilities Plan by the Chairman of the Joint Chiefs of Staff. The JSCP is issued biennially and assigns preparation of specific contingency plans to the combatant commanders/CINCs.

The JSCP identifies each operation planning task as requiring preparation of either an OPLAN, CONPLAN, or a type of plan not requiring conduct of military operations in a hostile environment, e.g., disaster relief plan. Because the OPLAN provides more detail and information than the CONPLAN, the CINCs may prepare OPLANS in lieu of CONPLANS at their own discretion. (JOPS Vol. I, p. II-6)

Occasionally, the CJCS may direct preparation of additional plans not included in the current Joint Strategic Capabilities Plan. This assignment may come to the combatant commander in the form of a message or other directive. The new tasking will normally be incorporated into the next edition of the JSCP.

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The CINC's planning tasks are not limited to those specified by higher authority. The CINC may prepare plans which have not been specifically assigned but which he considers necessary to discharge his command responsibilities or to cover contingencies not assigned by the JSCP or other directive. However, if in preparing these plans, the CINC expects to assign tasks to forces not currently under his operational command, JCS approval is necessary.

Another function of the JSCP is to identify major combat forces and strategic transportation available for the operation plan. These resources are called apportioned resources since they represent the combatant commander's share of the total U.S. military capabilities that are expected to be available for a plan during the planning cycle. The JSCP normally apportions only major combat forces, a term that includes combat, not support, units the size of Army and Marine Corps brigades or larger, Air Force squadrons, and Navy carrier battle groups and surface action groups. However, apportioned resources may also include limited, crucial assets such as minor combat forces, support forces, supplies, or strategic and theater transportation units. It is important to realize that the apportioned resources may differ from the numbers that may actually be furnished, or allocated, when the operation is executed.
Priorities are established by CJCS for OPLANs that compete for limited resources.

The Services have an input during the initiation phase of planning. Since the CJCS usually apportions only major combat forces, the Services must give the CINC information about combat (C), combat support (CS)\(^2\) and combat service support (CSS) forces\(^3\) that are available for planning. The Services forecast the availability of the replacement and augmenting personnel, materiel, equipment, and facilities. They also inform the combatant commander on Service doctrine, guidance, and priorities.

It is imperative that joint operation plans be coordinated during preparation with the supporting commands and agencies. These commands and agencies should be informed as early as possible during the planning process of the support which will be required. As the supported commander in a particular contingency, the CINC is authorized by the CJCS to task supporting commands and DoD agencies to provide essential information and to

\(^2\)Combat support units are those whose primary missions are to furnish operational assistance to combat forces. Examples of combat support units are units of the Army Signal Corps and units of Marine aviation which provide air support for infantry units.

\(^3\)Combat service support units furnish assistance to combat forces in the fields of administrative services, chaplain services, civil affairs, finance, legal services, health services, military police, supply, and maintenance, etc.
participate, as necessary, in the planning process. This may include the preparation of supporting plans. (JOPS Vol. I,p. II-9)

2. Concept Development Phase

After the CINC has received the task assignment, the mission is analyzed and tentative options are developed to satisfy the assignment. The concept development phase is an orderly series of five steps that takes the joint planners through a problem-solving process to develop the CINC's concept of operations. These five steps include:

- Step One: Mission Analysis
- Step Two: Planning Guidance
- Step Three: Staff Estimates
- Step Four: Commander's Estimate
- Step Five: Concept of Operations

The dividing line between steps is sometimes hard to see, since they are often repeated, combined, or done concurrently.

a. Step One: Mission Analysis

For the purposes of deliberate planning, a clear distinction must be made between a task and a mission. The Armed Forces Staff College (AFSC) defines a task as "a job or function assigned to a subordinate unit or command by higher authority." (AFSC Pub. 1,p. 6-17) The mission is "derived from the task assigned by higher authority and
includes the reason for that task." (AFSC Pub. 1,p. 6-17)
The task assigned by higher authority and the contribution it makes to that higher authority serve as the basis for development of the subordinate’s mission.

Before performing his assigned task the CINC must understand the objective, know what resources are available to accomplish the task, analyze the enemy and the physical conditions that affect the task, and define the guidelines that have been given by JCS. The first step in developing a military concept of operations is a careful analysis of the task assignment. The CINC and joint staff:

- determine assigned, implied, and subsidiary tasks so they can develop a concise mission statement;

- consider the forces that are available to complete the assigned task, the capabilities of the enemy, the terrain, geographic features that support friendly and enemy forces, and seasonal and climatic conditions; and

- incorporate controlling factors levied by others that will influence the military operation, such as diplomatic understandings, economic conditions, host-nation issues, etc.

Finally, the CINC considers the entire operation and then identifies tasks for subordinate commanders to perform.

The product of this first step is the mission statement. This mission statement appears throughout the planning process and is included in the planning guidance, the planning directive, staff estimate, the Commander’s Estimate, the concept of operations, and the completed CONPLAN or OPLAN. The mission statement is a clear, concise
statement of the tasks to be accomplished by the command and the purpose to be achieved. Multiple tasks are normally described in the sequence in which they are to be done. Routine tasks that are inherent responsibilities of the commander are not usually included. The elements of the mission statement are who, what, when, where, and, possibly how. Normally, how the operation will be conducted is decided by the subordinate commanders.

b. Step Two: Planning Guidance

This step has two objectives: first, to furnish enough initial planning guidance to the supported CINC's staff so they can begin work on the development of the concept of operations, and, second, to communicate guidance to the subordinate commanders.

The CINC normally communicates initial guidance to the staff, subordinate commanders and supporting commanders by publishing a planning directive to ensure that everyone is reading "from the same sheet of music." The planning guidance is centered around information concerning:

- assumptions which must be made to aid the staff in their understanding of the assigned task;
- tentative courses of action; and
- planning schedules.

The CINC will also communicate the mission statement and provide information concerning restrictions or other considerations which will affect their planning.
The assumptions of the supported commander have a significant impact on the entire planning process. An assumption is defined as:

a supposition on the current situation or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof, necessary to enable the commander in the process of planning to complete an estimate of the situation and make a decision on the course of action. (AFSC Pub. 1,p. 6-18)

An assumption usually covers the issues over which the commander has no control and possibly little knowledge. It is stated as if it were a fact and is treated as such by the subordinate and supporting commanders who often do not plan for the possibility that it is not a fact. Therefore, the statement of assumptions is critical in the development of the concept. If the assumption is later found to be incorrect, an alternate operation plan is generally needed. Because of their influence on planning, the fewest possible assumptions are included in an operation plan. A valid assumption possesses three characteristics: it is logical, realistic, and essential for the planning to continue. There must be some rational basis for the assumption. Planners cannot make assumptions simply because of a lack of accurate knowledge of friendly forces or intelligence about the enemy.

Commanders make assumptions regarding both friendly and enemy situations. Planners can assume the
success of friendly supporting operations that are essential to the success of their own plan, but cannot assume the success of their own operation. They should assume the worst-case scenario. Planners should not assume away an enemy capability. To do so, is dangerous and limits the depth of their own planning.

As the planning proceeds, additional assumptions may be necessary, some of the earlier assumptions may prove incorrect, and still others, in the light of new information, may be replaced with facts gained during the planning process. The use of assumptions is more prevalent for operations planned far into the future; the situation is less certain and assumptions must be made to complete the planning. In fact, no assumptions are usually found in an operation order (OPORD) that directs military operations in an actual contingency.

The tentative courses of action are another component of the initial planning guidance. The CINC's preliminary thinking on specific military actions is given early in the planning process to focus the thinking and actions of the staff. These preliminary or tentative COAs are options initially seen to be open to the military commander that will lead to the successful accomplishment of the mission. Normally, these tentative COAs are not fully analyzed and seldom contain all the elements of a refined COA. Tentative COAs may include only what action is to be
accomplished, i.e., amphibious or airborne assault, naval blockade, etc., and where the military action could take place. The refined COA contains who, what, where, when, and how.

A planning schedule is also usually issued in the commander's initial planning guidance, although the practice varies from command to command. Normally drawn up by the chief of staff, it sets milestones or deadline dates for completing staff estimates, for submitting data from subordinate and supporting commands, and for completing and distributing various elements of the contingency plan.

c. **Step Three: Staff Estimates**

The purpose of the staff estimates step is to take the initial tentative course of action and produce a refined COA. In accomplishing this the CINC's staff focuses on making a determination regarding the supportability of each tentative COA. Throughout this step the staff continually estimates and reestimates the situation in order to determine which COA can best be supported given the situation and the resources available.

The tentative COAs developed during the initial guidance and early staff estimates step may have been the result of initial impressions and based on limited staff analysis and inputs. As the step progresses, however, refined COAs evolve to include the following:
• what military operations are considered;
• where they will be performed;
• who will be conducting the operation;
• when the operation is planned to occur; and,
• in very general terms, how the operation will be conducted.

Figure 3-3 illustrates the involvement of the combatant commander’s staff in the deliberate planning effort. The joint staff divisions are designated as follows:

- J-1 Joint Personnel Staff
- J-2 Joint Intelligence Staff
- J-3 Joint Operations Staff
- J-4 Joint Logistics Staff
- J-5 Joint Deployment Staff
- J-6 Joint Command, Control, and Communications Staff

The J-5 normally coordinates the overall process of long range planning by preparing the initial planning guidance, and coordinating the staff estimates step. The staff estimates are prepared by the major staff divisions, J-1, J-2, J-4, and, J-6. The J-5 gathers information and with the J-3, proposes and revises COAs.

In preparing the staff estimates, each joint staff division:

• reviews the mission and situation from its own perspective;
COMMANDER'S ESTIMATE

1. MISSION
2. THE SITUATION AND COURSES OF ACTION
3. ANALYSIS OF OPPOSING COURSES OF ACTION
4. COMPARISON OF OWN COURSES OF ACTION
5. DECISION

ASSEMBLED BY J-5

PERSONNEL ESTIMATE INTELLIGENCE ESTIMATE OPERATIONS ESTIMATE LOGISTIC ESTIMATE SYSTEMS ESTIMATE

(J-1) (J-2) (OPTIONAL) (J-3) (J-4)

1. MISSION
2. THE SITUATION AND CONSIDERATIONS
3. ANALYSIS
4. COMPARISON
5. CONCLUSIONS

SYSTEMS ESTIMATE

COMAND, CONTROL, AND COMMUNICATIONS

Figure 3-3  Staff Estimates

Source: AFSC Publication 1
- examines the factors for which it is the responsible staff;
- analyzes each COA from its functional perspective;
- compares each COA based on its functional analysis; and
- conclude whether the mission can be supported and which COA can best be supported.

Because each of the joint staff divisions has unique talents, duties and focus, each staff estimate reflects a unique perspective that identifies certain assumptions, detailed aspects of the COAs, and potential deficiencies that are not known at other levels. The thoroughness of the analysis performed and the estimates produced by the staff divisions may determine the success of the military operation.

In the later stages of staff analysis, the J-5 focuses on selecting information from the staff estimates to facilitate the preparation of the Commander's Estimate.

**d. Step Four: Commander's Estimate**

After being directed by the CINC, the J-5 draws from the information in the staff estimates to develop the documentation of the Commander's Estimate which is then submitted for CINC approval. The Commander's Estimate (of the situation) can be defined as "a logical process of reasoning by which a commander considers all the circumstances affecting the military situation and arrives at a decision as to a course of action to be taken to..."
accomplish the mission." (AFSC Pub. 1, p. 6-23) In deliberate planning this estimate is a document that clearly states the CINC’s decision which is based upon the information provided in the staff estimates. It is used for communicating valuable guidance from the CINC to his staff and the subordinate commanders. It should be kept in mind that this is not a document intended to convince others of the wisdom of the selected COA. It is a summary of the thought process involved in that selection. Thus, it is a valuable tool for the CINC’s staff and those who will be involved in development of supporting plans and possible plan implementation.

The Commander’s Estimate will include the mission statement, a description of the situation, a delineation of possible courses of action, a comparison of the COAs, an analysis of enemy capabilities, and the decision on the course of action to take. In the next step the Commander’s Estimate is expanded to become the Concept of Operations.

e. Step Five: Concept of Operations

The concept of operations is a narrative description of how the commander expects to conduct the proposed operation. This statement serves two purposes:

- It clarifies the intent of the commander in the deployment, employment, and support of apportioned forces; and
It identifies **major objectives** and **target dates** for their attainment.

There are six elements which comprise the concept of operations: (1) the situation, (2) mission statement, (3&4) execution administration and logistics, (5) command and control, and (6) identified shortages. The amount of detail in the document will depend on what the final product is to be, whether it is to be a CONPLAN or an OPLAN as specified in the initial tasking. The level of detail is greater for the OPLAN concept of operations because it is the basis for a fully developed operation plan. The CONPLAN is not developed any further than it is in this phase.

The description of the **situation** specifies the probable preconditions for implementation of the plan, and possible deterrent options which are available. It will identify the expected operations of other friendly commands and the general tasks of those friendly forces. Lastly, it will state certain assumptions regarding the situation and identify the level of response, including the necessary level of mobilization, required to meet the challenge.

The **mission statement**, developed in the mission analysis step of this phase, is restated here in the concept of operations.

The concept provides some detail as to the proposed **execution** of the developing plan. It indicates **who**
will be employed; where forces will be employed; when forces will be phased into the theater of operations; what conventional, nuclear, deception, and other supporting operations will be utilized; the necessary deployment of forces; the tasks of each subordinate command; and what supporting plans will be needed.

Administration and logistics aspects focus on the amount and types of materiel and transportation crucial for deployment and employment of forces. A concept of logistics support is developed which includes information on stockage levels, pre-positioned war reserve materiel, and consumption levels. It will also address mutual allies' support requirements and inter-Service support. Finally, command and control relationships and guidelines are also delineated in the concept of operations, along with any personnel and/or materiel shortages and constraints which exist in any area of the plan.

The concept of operations is forwarded to the planning community to aid them in continued planning and to CJCS for review and approval. The CONPLAN is the document used to deliver the concept in its abbreviated format. There is no mandated format for the more detailed OPLAN concept of operations.

The review given the concept for an OPLAN differs from that given a CONPLAN. For a new OPLAN or an existing OPLAN with a changed concept of operations, the
Joint Staff, by the authority of the CJCS, conducts a concept review. The purpose of this concept review is to determine adequacy, one of the basic criteria for a joint operation plan. The review will determine whether the proposed scope and concept of operations are sufficient to accomplish the assigned task, assess the validity of the assumptions which were made, and check for compliance with the original JCS task assignment and guidance. When the concept is approved it is approved for "continued planning only."

For the CONPLAN a final review is conducted. No further development of this operation plan type by the CINC is required at this time. Therefore, this review for approval is the last the CONPLAN will receive.

This completes the concept development phase.

Further discussion of final review is presented in the plan review phase section later in this chapter.

3. Plan Development Phase

The approved concept of operations is expanded into a complete OPLAN during the plan development phase of deliberate planning. The previous phase, concept development, has been described as the most difficult phase of planning, but now begins the most detailed and time consuming. In the plan development phase there is a determination of whether the operation is possible using the
forces and transportation assets which were apportioned to the plan. Tens of thousands of separate combat and support units and shipments of materiel make up large OPLANS; the magnitude of the problem is immense.

The plan development phase generally follows eight consecutive steps. In reality, as with the steps of the concept development phase, these steps may overlap, be accomplished simultaneously, or repeat. The eight steps include:

- Step One: Force Planning
- Step Two: Support Planning
- Step Three: Nuclear/Biological/Chemical (NBC) Planning
- Step Four: Transportation Planning
- Step Five: Shortfall Identification
- Step Six: Transportation Feasibility Analysis
- Step Seven: TPFDD Refinement
- Step Eight: Documentation

Though this phase generally follows this sequence of steps, resource shortfall identification is being performed throughout the process. The supported commander must continually monitor the situation and planning processes for limiting factors and capabilities shortfalls. Where possible the CINC resolves these constraint problems through planning adjustments and coordination with the Service component and supporting commanders. When the shortages cannot be resolved the commander reports the shortage and
its probable impact on operations to the CJCS. However, these shortfalls do not delay the completion of the plan. (JCS Pub. 5-0, p. III-10)

a. Step 1: Force Planning

Force planning consists of determining force requirements, developing and refining force lists in light of force availability, and identifying and relieving force shortfalls. It is in this force planning step that the supporting commanders time-phase their force lists to sequence the arrival of forces in the theater of operation in accordance with the planned concept of operations. Step 1 entails the phasing of the units, determining the mode of transportation, port of debarkation, proposed earliest and latest arrival date, the required delivery dates, and the point of destination, etc. (JOPS Vol. I, p. II-12)

Although force planning, including the time-phasing of all forces and support in the TPFDD, is ultimately the responsibility of the supported commander, each of the Service component commanders develops his own total force list composed of combat (C), combat support (CS), and combat service support forces (CSS) (JOPS Vol. I, p. II-12). This is accomplished using Service-unique, planning documents: Army Mobilization Operations Planning System (AMOPS), Navy Capabilities and Mobilization Plan
(NCMP) and fleet planning guidance, Marine Capabilities Plan (MCP), and Air Force War and Mobilization Plan (WMP). These component force lists are then consolidated to become the CINC's force list. The database for this list is the OPLAN TPFDD.

Initially, during the concept development phase, the apportioned major combat forces were described in terms of relatively large fighting units, such as Army divisions and brigades, Navy carrier battlegroups and surface action groups, Marine Expeditionary forces and brigades, and Air Force wings and squadrons. The final product of each Service component's total force list includes detail down to the unit level, i.e., battalions, squadrons, detachments, teams, etc. This section will deal with the way in which these total force lists are created and phased into the theater.

The movement of forces demands planning by several levels of command, possibly stops at intermediate locations enroute to their ultimate destination, and a schedule constrained by a variety of operational requirements. These fundamental considerations in the employment of forces are first identified and considered during the force planning step. Figure 3-4 illustrates the movement of forces and resources.

First, it is necessary that some of the terms used to describe the movement of troops be discussed and
Figure 3-4 Movement of Forces

Source: AFSC Publication 1
understood to really understand this step in the planning process. These essential terms deal with the movement and the timing of the movement of forces and supplies.

(1) Movement. The destination (DEST), the geographic location where the force is to be employed, is the basis for the calculations of dates and the determination of locations used in deliberate planning. The DEST is the terminal geographic location for the movement of forces. The DEST may or may not be the point where the force makes direct contact with the enemy. It may be some other point of employment specified in the CINC’s concept of operations. For example, the DEST for an Army service company might be a transshipment point miles from direct contact with the enemy. Reaching the DEST may require strategic and theater transportation which is controlled by subordinate and supporting commanders.

The port of debarkation (POD) is the airport or seaport within the theater of operations which is the terminal point for the strategic transportation of forces. It may or may not be the ultimate destination of the force. For example, troops, whose POD is an airfield in central Saudi Arabia, may have to be transported further to their defensive position on the Iraqi Border, the DEST. In some cases the POD and DEST are the same point, e.g., an airfield
in Saudi Arabia may be the final destination for an Air Force squadron.

The **port of support** (POS) is a geographic location within the theater which is the terminal point for strategic transportation of air-transported supplies, resupply, and replacement personnel; sealift ammo; sealift petroleum, oil, and lubricants (POL); and sealift supplies and resupply. It is usually a distribution point requiring intratheater transportation to the point where the supplies are needed.

The beginning point for strategic sealift and airlift, usually in the continental United States (CONUS), is the **port of embarkation** (POE). The **origin** (ORIGIN) is the starting point for a deployment move. For instance, Fort Bragg is the ORIGIN and Pope Air Force Base the POE for the 82d Airborne Division. Transportation to the POE is the planning responsibility of the commander or Service providing the forces or support to the CINC. They may use either their own transportation resources or arrange transportation through a supporting command such as USTRANSCOM’s Service component, the Army Military Traffic Management Command (MTMC).

There are other locations which may influence deployment. Each is referred to as an **intermediate location** (ILOC). The ILOC is a stopping point in the deployment movement where strategic staging, changing
the mode of transportation, necessary cargo handling, training, or marrying of forces and equipment that are being transported by split shipment may occur. The ILOC can be any place between the ORIGIN and POE, POE and POD, or POD and DEST.

One type of ILOC is a **marshalling area** where troops are matched with pre-positioned war reserve materiel stocks (PWRMS) of equipment and supplies. Pre-positioned stocks may be either Army pre-positioned organizational materiel configured in unit sets (POMCUS) or afloat pre-positioned forces (APF) that make up the Marine maritime pre-positioned ships (MPS) and Army and Air Force pre-positioned stocks (PREPO).

The **strategic staging location** for holding forces not yet directly committed to the theater's military operation is another type of ILOC.

The final ILOC of major concern in the planning process is the **assembly area**, the location where units assemble before tactical employment.

All of these locations play important roles in the deployment of forces and supplies. The arrival at the DEST is the key to successful participation in the operation. Therefore, the readying of forces and supplies at the ORIGIN and POE, scheduling strategic transportation (with or without intermediate stops), and scheduling theater transportation from POD to DEST, all influence the planning,
timing, and therefore, the ultimate success or failure of the operation.

(2) Timing. Having specified times and/or dates for individual events is important in the planning effort. They afford a method of tracking the movement of resources and measuring the attainment of the CINC's schedule for involvement of forces and arrival of supplies. Additionally, the assignment of dates allows the computer to compare simulated movement with the CINC's desired movement schedule.

The combatant commander first establishes a required delivery date (RDD) by which a force must arrive and unload at its DEST if it is to take a supportive and meaningful part in the outcome of the operation. Arriving too early may create an unnecessary logistic support problem and arriving too late may mean the forces cannot be effectively used. A comparatively new term, CINC's required date (CRD), has been created in response to the administrative altering of the RDD by planners that takes place throughout plan development to resolve expected/simulated shortfalls. The use of the CRD makes the date when the CINC requires resources to arrive highly visible and designates this date as unalterable except by direction of the CINC.
In planning a strategic move, planners begin with the RDD to determine some important interim dates. Planners are interested in ensuring that units arrive at the POD during a time window between the earliest arrival date (EAD) and the latest arrival date (LAD). The EAD is the earliest allowable date that the first personnel or equipment may offload from strategic lift at the POD; the LAD is the latest date for the last to arrive and complete offloading. (The offloading of the last units is termed "closing the force.") Planners must also allow for transportation time that may be required between the POD and DEST; this is the time difference between LAD and RDD.

At the other end of the movement, the mobilization and intra-CONUS planners (the Services and the supporting transportation commands) are primarily concerned with readying and scheduling the forces at their home (HOME) (as in the case of reserves), mobilization sites, and ORIGIN. The earliest date a unit is ready for onward transportation at the ORIGIN to the POE is the ready-to-load date (RLD). The available to load date (ALD) is the earliest the unit can begin the actual loading at the POE and the earliest date at which the loading is completed is the earliest date of completion (EDC). The earliest date that the shipment is ready to depart from the POE is the earliest departure date (EDD). Supposedly, these dates would be calculated backwards from the RDD taking into
consideration the time consumed in strategic and tactical transportation and at the ILOCs. However, in actual practice, there is seldom any slack time early in the planning period and the activities are just accomplished as soon as possible. Thus, the RLD and ALD are usually the minimum time required to prepare the units, equipment, and supplies, and transport them to the POE and prepare them for loading. Any delays in these early stages can adversely affect the entire operation.

(3) Perspectives in Planning. At this point it might be helpful to see how some of the different planning perspectives, which were discussed in the previous chapter, come into play in force planning.

Mobilization planning can have a significant effect upon strategic lift and ultimately, the arrival of combat units in the theater of operations. Therefore, the supported commander cannot fail to give it serious consideration. For instance, the movement of reserve units can be a very complicated and resource demanding endeavor. They may require movement from their HOME to their mobilization site. Then they may need to be moved to an active duty base (ORIGIN) for training and equipping. Further movement to the POE may be necessary to meet with strategic transports. Serious transportation problems may arise even before the troops ever leave CONUS. Similar
obstacles may arise for active duty troops. This enormous arena of planning is the responsibility of the Service involved and is executed through the USTRANSCOM component, MTC.

Strategic deployment planning, which is the central focus of deliberate planning, involves the strategic transportation from POE to POD or POE to POS. This strategic transportation is by sealift and airlift assets that are apportioned to the CINC. When the OPLAN is implemented, this lift is provided by the supporting command, USTRANSCOM, through MAC or MSC.

Once forces or supplies have reached the theater of operations, transportation may be required from the POD to the DEST. Planning for this type of movement is called theater deployment planning. A primary concern at this point is that transportation resources may have been inadequately apportioned in the JSCP or may be limited by service capabilities. Hence, it may not meet the levels required to achieve the RDD.

Another planning area vital to the success of the CINC's concept of operations is employment planning. It involves planning for the actual use of the personnel and materiel in the theater. Subordinate commanders, such as Service component commanders and joint task force commanders, normally assume responsibility for planning for the employment of these resources.
Last, and certainly not the least of the planning concerns, is the Service's responsibility to sustain its forces for the duration of the operation. Sustainment planning involves the resupply of materiel and replacement of personnel lost.

ADP support in all the areas of this complicated process is essential. The most extensive version of JOPES is expected to consider the full planning spectrum from the initial movement of forces in mobilization through the monitoring of employment and sustainment activities.

(4) Building the Force List. In the force planning step, Service component planners must create a force list. Two of the primary means of building this force list are to create a force unit by unit or use force modules. Planners create a force unit by unit starting with the apportioned combat forces and adding the necessary CS and CSS forces identified in the Service's doctrine as being essential to the successful operation of the combat force. This is very time consuming. OPLANS may contain several thousand separately identifiable units, or force requirements, and thus scores of data elements for each entry are needed to adequately plan the movement of forces.
For the planner to be able to build a force list unit by unit, the following unit descriptive information must be available:

- approximate physical characteristics in terms of the number of personnel, weight and volume of equipment and accompanying supplies;
- approximate movement characteristics such as self-deploying aircraft and operators, size of palletable material, and its ability to fit on current-inventory tactical and strategic aircraft;
- special characteristics of supplies, i.e., hazardous, explosive, etc., so special handling can be arranged; and
- unique operational characteristics that may allow shipping less than the entire unit.

Unit movement information, like ORIGIN, POE, ILOC, POD, and DEST, is also needed.

One thing that makes this task so complicated is that each active duty and reserve unit in the Armed Forces differs from the others. Even similar units within a service may have different unit performance characteristics, vary in the number of personnel and equipment assets, and possess different unit readiness and combat capabilities. At this stage of planning no attempt is made to distinguish between similar units. Instead, a model is substituted in the database, one that generally represents each different category of unit. It is called a "notional" or type unit. There are nearly 8,500 of these type units on file. They represent units ranging from "a two-person Air Force personnel team to a 6,500 man
nuclear-powered aircraft carrier." (AFSC Pub. 1, p. 6-38)
But, even using these type units the process is extremely
complex and time consuming.

An alternative to creating a force unit-by-
unit, and a much faster method, is the use of force modules.
These modules are "packages" or groupings of related C, CS,
and CSS forces along with a calculated amount of sustainment
each will require. This precludes the time consuming
activity of matching CS and CSS units with the combat
forces. An example of a module is the Special Interest Tank
Module which consists of the Airborne 1st Tank Company,
Airborne 1st Cavalry Company, the Airborne 3rd Armored
Company, and accompanying communications, medical,
engineering and other support units, supplies and equipment
(JOPESCAI Version 3.41). The modules are listed in the
Force Module Library (FML) which is a reference file in the
JOPES system. Each module can be added to the plan's data
base or TPFDD using a unique three character force module
identifier (FMI).

Manually creating the force list using
either method would take an extensive amount of time and
effort. The ADP support provided through JOPES and WWMCCS
helps tremendously in building a plan.

Suggested times for the RLD at the ORIGIN,
ALD at the POE, and EAD and LAD at the POD for each unit are
also introduced into the plan at this time. These times are
determined by calculating the time required for transport by the different strategic and tactical lift assets which were apportioned to the plan; using professional estimates of necessary loading and unloading times, marshalling and assembly times for men and equipment, final transport time to the DEST; and the RDD/CRD set by the CINC.

(5) Automatic Data Processing Support. As previously stated, the task facing the planner is monumental, and JOPES and WWMCCS offer much needed and appreciated assistance in the creation of a force list. The basic elements of this ADP support for force planning are the focus of this section. It explains the key concepts by describing unit movement characteristics, timing of movements, and unique record entry identifiers. The two application programs that use the data to build the force list are introduced at the end of this section.

The Type Unit Characteristics File (TUCHA) contains information on the movement characteristics of the type (hypothetical) units used for building force lists. It describes the "capabilities of each type unit in narrative form and defines the unit in terms of total personnel; numbers requiring transportation; categories of cargo in the

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4The Type Unit Characteristics File is also called the Type Unit Data File in some literature. It retains the acronym "TUCHA" in either case.
unit; weight of equipment and accompanying supplies; volume of equipment categorized as bulk, outsize, oversize, or non-air-transportable; and numbers and dimensions of individual units of equipment." (AFSC Pub. 1,p. 6-39) The data in the TUCHA are accessed using "unit type codes" which are five element alphanumeric codes that identify units having common functional characteristics.

To complete the development of each force requirement, the planner must determine the key dates for required movements and enter these in the force record. This **timing of movements** is done by beginning with the CINC's RDD or CRD, and calculating the EAD/LAD window at the POD or POS and the EADs and LADs at intermediate locations. The calculation of these dates is not automated and they must be entered by the responsible planner.

When the force list is completely assembled, each individual force record, or line entry, is assigned a plan-unique alphanumeric code called a **force requirement number** (FRN) which is a unique record entry identifier for that particular entry in the OPLAN. Once the FRN is assigned to a unit, it generally remains unchanged throughout the course of the plan. The FRN can aid the planner in tracking a particular unit that may have changed sequence in the TPFDD.

The **Force Requirements Generator** (FRG) is the application program in JOPES which specifically deals
with force planning. The planner is assisted by the FRG in creating a force requirements file and in analyzing and changing the data. It supplies a formatted database, input to other automated files, working papers for analysis, and reports for attachment to the OPLAN. By using the FRG the planner can operate in an on-line, interactive, time-shared environment.

The FRG extracts information from a number of different files. A listing and brief description of the JOPES and WWMCCS standard reference files utilized by the FRG are presented in Figures 3-5 and 3-6.

Another application program is the Force Module Subsystem (FMS). Through the FMS the planner has access to previously created TPFDD files and to the Force Module Library containing previously created force modules. From these sources he can select FMs which can be used to meet his mission requirements. The planner can then enter these FMs into the TPFDD he is creating, making force list creation much quicker.

Up until this point the discussion of force list creation has been centered around the use of type units in the building of force lists. The Services can use actual (real-world) forces to build their lists if these forces are known. Some Services do use actual units in their planning documents. Ultimately the type units must be replaced with more precise information by the Service components before
| **APORTS** | AERIAL PORTS AND AIR OPERATING BASES FILE | • Airfield planning factors, e.g., throughput capacities for free-world air facilities, runway length & width, weight-bearing capacity, A/C parking space, fuel & cargo storage capacity, etc |
| **ASSETS** | TRANSPORTATION ASSETS | • Time-phased availability of common-carrier air- & sealift facilities, runway length & width, weight-bearing capacity, aircraft parking space, fuel & cargo storage capacity, etc |
| **CHSTR** | CHARACTERISTICS OF TRANSPORTATION RESOURCES | • Standard planning factors for airlift available for deployment planning, e.g., utilization rate, passenger & cargo capacity, speed, range, load/off-load times, etc |
| **PORTS** | PORT CHARACTERISTICS | • Standard planning factors for sealift available for deployment planning, e.g., ship category, cargo capacity, average speed, load/off-load times, etc |
| **SDF** | STANDARD DISTANCE FILE | • Information on physical and operating characteristics of selected free-world ports, e.g., size, depth, number of berths, beach data, categories & capacities of cargo-handling & storage facilities |
| **TUCHA** | TYPE UNIT DATA | • Distance between POE-POD pairs listing mode of transport, POE-POD, GEOLOC code, Suez/Panama Canal status, OPLAN identification, number of stops, computed distance |
| **TUDET** | TYPE UNIT EQUIPMENT DETAIL | • Movement characteristics for standard deployable units |
| **LFF** | LOGISTIC FACTORS FILE | • Force descriptions for nondeployable unit types |
| **CEF** | CIVIL ENGINEERING FILES | • Descriptions of deployable facility sets |
| **FM LIBRARY** | FORCE MODULE LIBRARY | • Operational capability of Service construction units |
| **SOURCE:** | AFSC Publication 1 | • Description of Service facility component systems |

**Figure 3-5  JOPES Standard Reference File**
<table>
<thead>
<tr>
<th>GEOFILE</th>
<th>STANDARD GEOGRAPHIC LOCATIONS</th>
<th>Worldwide geographic locations and sites listed by country &amp; state, installation type, latitude and longitude coordinates, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SORTS</td>
<td>STATUS OF RESOURCES AND TRAINING SYSTEM</td>
<td>Report of unit readiness in terms of authorized/actual personnel strength, percent of assigned equipment ready for employment, shortages of assigned personnel or equipment, etc.</td>
</tr>
<tr>
<td>NACE/AUTODIN</td>
<td>NMCS AUTOMATED CONTROL EXECUTIVE AND AUTODIN</td>
<td>Real-time system to automate the collection, routing, and initiation of message data processing from WWMCCS AUTODIN</td>
</tr>
</tbody>
</table>

Figure 3-6  WWMCCS Standard Reference Files

Source: AFSC Publication 1
plan development is completed. The exception is the Navy, which is unable to identify specific units early in the planning process because of the mobility and self-deploying capability of its units. Because of this, the Navy will generally use type units throughout the deliberate planning process.

Once the Service component commands have completed their time-phased force lists, they are submitted to the supported commander for review and approval. The CINC’s staff will merge the lists and analyze the consolidated list to confirm that it is adequate for accomplishing the assigned mission. The consolidated force list is then submitted to the supported commander for his approval.

b. **Step 2: Support Planning**

Early in the planning effort the CINC defines the length of the operation, availability of strategic lift, supply buildup policies, and anticipated shortages. He also provides guidance on transportation priorities, and servicing agreements between subordinate and supporting commands, etc., to aid in the support planning endeavor.

The purpose of the support planning phase is to identify the quantities of supplies, equipment, and replacement personnel needed to support the combat, combat support, and combat service support units employed in the
operation. The intent is not to identify detailed levels of particular supplies, but to identify and phase into the theater gross quantities of sustainment. Support planning identifies broad categories of supplies, equipment, and personnel and converts them into weights, volumes, and numbers. The actual calculations are generally made by the Service component commanders using consumption rates developed and maintained by the Services. These supplies are then phased into the theater to avoid overloading the logistics support facilities and transportation assets.

During the support planning step, the primary concern of the planners is how much strategic lift will be needed to move the support requirements. The initial gross estimates aid in the initial determination of space and number of seats required. However, before the operation plan is complete, and certainly before implementation, logistics and personnel planners will attempt to define support requirements in more detail.

When all significant supply, equipment, and personnel requirements have been determined, consolidated by the supported commander, and entered in the TPFDD file, support planning is complete.

(1) Support Planning Terminology. In order to better understand the support planning process and its
elements, the next few paragraphs are a brief discussion of some of the common terms used in the support planning.

There are two major categories of support requirements for deploying forces. These are **unit-related** supplies and equipment and **non-unit-related** supplies and equipment.

The **unit-related** supplies and equipment include the unit's organic equipment, the unit's **basic load**, and **additional accompanying** supplies which are specified by the combatant commander. The **basic load** is the quantity of supplies required to be on hand within the unit which provide it with the capability of engaging the enemy immediately upon arrival at the DEST. The basic load is included as a part of the unit equipment list in the TUCHA file. Some units will deploy with 15 to 30 days of supplies, while others carry no basic load. When the unit is selected from the TUCHA file and added to the TPFDD, the basic load is automatically added as well. So, when calculating support requirements, the planner must be aware of the supply quantities and consumption rates that are considered basic load and already included in the TUCHA. This can be identified through Service documents.

When a unit deploys it is normally required to carry enough supplies to perform its mission without being resupplied for a specified timeframe, usually one to five days. The period of time that the unit must be
self-sustaining is specified by the CINC in the concept of operations. If this requirement is not met by the unit’s basic load, additional accompanying supplies must be utilized. The amount of additional accompanying supplies needed must be calculated for each unit and added to the OPLAN TPFDD.

Non-unit-related supplies and equipment are supplies not identified for a specific unit. They include all supplies which are not in the TUCHA or augmented by additional accompanying supplies. This type of supplies and equipment can be further subcategorized into PWRMS, sustaining supplies, resupply, and replacement personnel.

As discussed previously PWRMS are a forward-deployed portion of the nation’s total war reserve stocks. The pre-positioning of supplies eliminates some of the competing demands for strategic lift in the early days of deployment. It is a vital sustainment asset which helps to bridge the gap between the time when a unit begins its operations in the theater to the time that continuous resupply can be established. Examples of PWRMS are the Army’s POMCUS program in Europe, the Army and Air Force PREPO program in the Mediterranean Sea and Indian Ocean, and the Marine Expeditionary Brigade pre-positioning in Norway.

Forces need sustaining supplies to support them during the period between the time their unit-related supplies and PWRMS are depleted and the continuous resupply
pipeline opens. If forces are deployed over long distances
the resupply pipeline depends largely on sealift. Sealift
can take days or weeks to begin making regular resupply
runs. Therefore, airlift assets are normally used to
deliver sustaining supplies.

Resupply is the shipping of supplies in a
regular flow as established in the plan schedules. It
consists of all the materials required to sustain forces
which are in-place or deploying to the theater. As long as
forces remain in the area of operations, resupply will be a
continuous requirement.

Supplies in excess of those needed for
immediate consumption that can be stockpiled in the area of
operations are referred to as supply buildup. If the supply
pipeline is interrupted, the supply stockpile will continue
to sustain the forces until regular supply lines can be
reestablished. The CINC designates the supply buildup
policy. For instance, the supply buildup policy may
stipulate that a 30 day supply of all supply classes is to
be in place at the end of 30 days after the arrival of
forces in the theater.

The non-unit related category also includes
replacement personnel. These replacement personnel are
intended to return units to 100 percent combat effectiveness
on a daily basis. The calculations for the number and
timing of replacements are made using "Service attrition
factors at various rates for noncombat losses and intensities of combat." (AFSC Pub. 1, p. 6-49) The replacement personnel are time-phased into the theater at regular intervals. Filler personnel are those people of suitable grade and skill required to initially bring the unit to its authorized strength.

Items in the federal supply system are divided into 10 classes and then into over 40 subclasses of supply. This classification scheme is illustrated in Figure 3-7.

The strategic deployment of supplies to the POS is determined by the planner using ADP support. A POS is designated by the component commander for air cargo, general sea cargo, POL, and munitions for each place their forces are located. After the materiel reaches the POS any further onward transportation is the responsibility of the service component.

(2) Automated Data Processing Support. ADP support for support planning is accomplished primarily through JOPES subsystems. These include the Movement Requirements Generator (MRG), the Civil Engineering Support Plan Generator (CESPG), the Medical Planning Module (MPM), the Non-unit Personnel Generator (NPG), the Logistics Capabilities Estimator (LCE), and the Logistics Sustainment
Figure 3-7  Classes and Subclasses of Supply

Source: AFSC Publication 1
Analysis Feasibility Estimator (LOGSAFE) which is currently being developed.

The Movement Requirements Generator is a primary tool employed in support planning. It is used to calculate the gross non-unit-related supplies and equipment needed to support the operation plan. These gross determinations are added to the TPFDD after they are translated into weights and volumes. The MRG is also used to calculate the movement requirements for non-unit-related personnel and supplies. The planner can also selectively combine data to reduce the number of non-unit cargo records using the EAD/LAD window at each POS, and thus can better establish and schedule containerized cargo movement requirements.

The Civil Engineering Support Plan Generator is a series of computer programs and data collection packages that aid in the evaluation of the adequacy of civil engineering support. The CESPG can generate numerous reports which can be used to identify facilities needed in-theater, projected requirements for the repair of war damage, and deficiencies and shortfalls in civil engineering capabilities. With these requirements identified, a support plan can be developed to meet the need.

Medical requirements are analyzed by using the Medical Planning Module. It considers the population at risk, the length of time personnel will stay in hospital
facilities, and Service-developed frequency data for injury and death. This information is then used to determine patient load, and patient evacuation requirements, etc., for medical support planning.

The numbers of personnel losses generated by the MPM are used by the Non-unit Personnel Generator to calculate required non-unit replacement personnel. These replacement personnel are required for all casualties, i.e., killed in action, prisoners of war, missing in action, administratively lost, and injured. The replacement calculations are scenario-dependent and, once made, are added to the TPFDD of the operation plan.

The MRG has been used in the past for calculating supply requirements. However, it does not identify supplies available through Service and Defense Logistics Agency inventories. Therefore, true supply capabilities were not reflected in the MRG calculations and planning. The development of the Logistics Capability Estimator was an attempt to alleviate this problem. However, the LCE has not lived up to expectations. Both the LCE and MRG are "slow, cumbersome, error-prone, not user friendly," and do not provide logistics planners with the capabilities they require for analysis and planning. (JOPES Master Plan Segment 1, September 1991, p. A-3-11) The JPEC still primarily uses the MRG for sustainment support planning.
The Logistics Sustainment Analysis Feasibility Estimator is under development to replace the MRG and LCE. Basic LOGSAFE capabilities include Essential Sustainment Item Modeling and General Supply Modeling. Essential Sustainment Item Modeling allows the planner to calculate resupply requirements of what are termed "essential supply items" which have a significant impact on operations. He can then compare the requirements for these items with the supplies available and report shortfalls. General Supply Modeling recognizes supplies, other than these essential supply items, which are categorized into seven broad categories: container and noncontainer general cargo, container and noncontainer ammunition, bulk POL, water, and refrigerated cargo; and allows the same comparison and shortfall report functions to be performed.

By using the ADP support provided by these programs, the planner is able to make rapid supply calculations and thus greatly improve the ability to assess the supportability of tentative COAs and develop a feasible OPLAN.

c. Step 3: Nuclear/Biological/Chemical (NBC) Planning

(1) Chemical/Biological (CB) Planning. U.S. chemical biological (CB) operations are strictly defensive activities for defending against the CB weapons of the
enemy. The Service component commanders are responsible for developing their own plans for operations in the CB environment. Considerations in plan development include: "enemy CB capabilities, friendly CB capabilities, related assumptions, alternative missions the supported commander should be prepared to undertake if authorized by the President, chemical concept of operations, weapons allocations, subordinate tasks, storage and transportation, and release procedures." (AFSC Pub. 1, p. 6-58) The list of identified requirements of each Service is submitted to the supported commander who consolidates them into a single joint stand-alone TPFDD file. This file is separate from the OPLAN TPFDD. It is identified by the suffix "Z" on the identification number of the plan of which it is a part. The plan identification number (PID) is a four digit number used to identify individual operation plans, i.e., 0009Z.

(2) Nuclear Planning. In the area of nuclear planning the joint planner must execute his planning activities with the realization that there is the possibility of the use of nuclear weapons and that the CINC lacks control over the decision for their initial use. Political policies form the basis for nuclear planning guidance issued at the unified and combined command level. This political policy is now undergoing dramatic changes, which makes planning extremely difficult. However, there
are still three broad categories which encompass nuclear warfare planning:

- Planning for **strategic retaliatory strikes** in general war is conducted by the Joint Strategic Target Planning Staff (JSTPS) at Offutt AFB, Nebraska. This planning is done in coordination with U.S. unified and specified combatant commanders and certain allied commanders. The final product is the Single Integrated Operational Plan (SIOP).

- There may be operations in which there is a **planned use of tactical nuclear weapons**. The planned use of these weapons is directly related to and affects all of the other planning for the operation. This planning cannot be done in isolation from the rest of the operation.

- Planning may be done in which the **use of nuclear weapons is not intended**, but the possibility exists for their introduction into the conflict by either side. In this situation, the planner's task is extremely difficult. Here, a basic plan which is adaptable to nuclear operations must be created. The basic OPLAN will follow the expected pattern for a conventional conflict, but alternate instructions will exist offering a nuclear option.

As in CB planning, the supported commander consolidates the nuclear requirements as force records in a stand-alone TPFDD file which is identified by the suffix "N" on the PID, i.e., 0009N. This TPFDD file is transmitted to USTRANSCOM for scheduling priority on lift and inclusion in the deployment database.

**d. Step 4: Transportation Planning**

The supported commander performs transportation planning with the goal of producing a feasible **strategic** transportation movement in support of the OPLAN. Given the limited strategic resources available and the numbers of
personnel and shipments involved, this can be a very
difficult thing to do. The task facing the planner is to
simulate the strategic movements which the component
planners generated during the force planning and support
planning steps using the JSCP apportioned strategic
transportation assets. Transportation planning is an
iterative process as illustrated in Figure 3-8. If the
simulation reveals that the forces and non-unit supplies
cannot be moved in time to meet the specified deadlines, the
planners must identify the problems, evaluate their impact
on the overall OPLAN, develop and incorporate solutions into
the plan, and if necessary, run the simulation again. This
step and the next two, shortfall analysis and transportation
feasibility analysis, are closely related and interdependent
as can be seen in Figure 3-8.

At this point in deployment planning all
available details of the OPLAN are to be entered into the
TPFDD. Thus, the first step in transportation planning is
completion of the force and unit record entries. The
component planners designate as many actual, real-world
units as they can to replace the type units in the force
list. This is known as sourcing.

Each of the Services accomplishes sourcing in
different ways. The Army’s Forces Command (FORSCOM) selects
forces for that service. In the Air Force, the major
commands and operating agencies source combat and support
Figure 3-8  Transportation: An Iterative Process

Source: AFSC Publication 1
forces. The Navy sources only a few of its requirements at this point in the deliberate planning process because of the mobility and self-deploying capability of its units. The Navy generally will complete OPLAN sourcing only during time-sensitive (crisis action) planning. When sourcing is complete the TPFDD file should contain actual unit and actual movement data.

As mentioned previously, when the expected arrival times of forces and supplies does not meet with CINC requirements a transportation shortfall exists. This shortfall may be discovered through a computer simulation, by manual calculations done by logisticians, or a "best guess" by a planner. The earlier a shortfall can be detected, the better. ADP support in simulation makes this earlier detection easier.

A JOPEC subsystem, the Transportation Feasibility Estimator (TFE) simulates the strategic movement. The supported command planners run a simulation of the air and sea movement of forces and their required supplies from POE to POD. The transportation assets apportioned in the JSCP are used for this "move." The simulation incorporates all the known possible factors which could influence this movement and calculates a computer-simulated feasible arrival date (FAD). The FAD is then compared to the CINC's LAD. If the FAD is on or before the LAD the OPLAN is said to be grossly transportation feasible.
Because transportation assets, OPLAN force records, and resupplies have all not been completely sourced at this time, a statement cannot be made with absolute certainty that the entire OPLAN is feasible. All that can be said is that the plan is grossly feasible in the area of strategic transportation.

The TFE consists of four phases:

- In the **TPFDD evaluation** phase, the planner can display and analyze information already in the TPFDD.

- Planning parameters are set in the **simulation preparation** phase. This phase involves extraction of information from the TPFDD, generation of distance data from reference files, identification of port constraints, selection of transportation assets that match apportioned forces, definitions of asset characteristics, and introduction of attrition rates.

- In **simulation execution** computer programs are produced to model the transportation flow based on the parameters identified in the simulation preparation phase above. The results of the simulation can be displayed in either summary or detailed format. Sea and air modes are simulated, but the TFE does not automatically select the best transportation mode nor does it optimize the transportation solution.

- Reports are produced in **post-simulation processing** which identify the computed estimated departure date (EDD) from the POE and the FAD at the POD.

There are a number of transportation-related ADP files used by planners to gather information for planning. Among these are some of the files from which the TFE draws information to perform its simulation and generate reports:

- **ASSETS** provides information by vehicle type, source, and mobilization condition for all military and commercial transportation used for strategic airlift and sealift. (JOPES Master Plan Segment 1, September 1991, p. A-3-1)
• The **Geographic Locations Code File System** (GEOFILE) contains worldwide geographic data for locations specified by different commanders. (JOPES Master Plan Segment 1, September 1991, p. A-3-4)

• The **Characteristics of Transportation Resources File** (CHSTR) provides operating and physical characteristics of ships and aircraft. (JOPES Master Plan Segment 1, September 1991, p. A-3-2)

• The **Ports Characteristics File** (PORTS) contains basic data on seaports. (JOPES Master Plan Segment 1, September 1991, p. A-3-14)

• The **Aerial Ports File** (APORTS) consists of records describing airfields in the Free World that have one or more runways with a length of at least 2,600 feet with a minimum Load Configuration Number (LCN) of 37. (JOPES Master Plan Segment 1, September 1991, p. A-3-1)

• The **TUCHA** file provides movement characteristics of standard deployable type units of fixed composition. (JOPES Master Plan Segment 1, September 1991, p. A-3-1)

• There are also ship availability files.

  Reports generated by the TFE include the POE/POD facility daily workload, strategic lift requirements, intra-theater daily lift requirement (POD to DEST), daily aircraft and ship use, summaries of force and non-unit records delivered, and summary of planning factors reports.

  e. **Retrograde, Noncombat Evacuation Operations (NREO) and Medical Evacuation (MEDDEVAC) Planning**

  Even though retrograde, noncombat evacuation operation, and medical evacuation planning are not included as a distinct step in the plan development phase, the transport of personnel and materiel from the theater of operations requires considerable planning effort.
Retrograde movements are those movements of personnel and/or cargo out of the area of operations back to their point of origin. Retrograde, movement of equipment requiring repair, noncombatant evacuation operations, and medical evacuation out of the combat area are real concerns for the logistics planner. A separate retrograde TPFDD is created which consolidates the requirements in these areas, for addition to the OPLAN.

f. Step Five: Shortfall Identification

Although recognized as a distinct and separate step, shortfall identification takes place throughout the deliberate planning process. This particular step, however, focuses on the identification and resolution of transportation shortfalls brought to light in the TFE simulation.

Planners will identify unresolved shortfalls that require corrective action by higher-level decisionmakers, or those that must be resolved with other commanders through compromise or mutual agreement. Any one or a combination of the following alternatives may be used to resolve a shortfall:

- shift priority of force or non-unit cargo;
- adjust route or timing of movement, i.e., POE, POD, POS, ILOC;
- change the mode of strategic lift;
• modify levels of pre-positioned resources, e.g., forces, non-unit supplies, etc.;
• enhance facility capabilities with new construction or upgrading;
• seek additional assets;
• conclude contractual agreements and inter-Service support agreements;
• arrange for host-nation support; or
• redefine the concept of operations.

The combatant commander alone can approve changes that affect the concept of operations or concept of logistics support.

There may be situations where either the identified shortfall simply cannot be resolved due to inadequate resources or any of the possible alternatives would not be a satisfactory solution. In this case, a report stating the shortfall and other limiting factors, the associated risk of not resolving the shortfall, the threat level that can be met by the apportioned resources, and any recommended change in the task assignment are submitted to the CJCS for resolution.

However, planning does not stop because of the unresolved shortfall. The OPLAN will be submitted for approval based on known capabilities; the Plan Summary which is part of the OPLAN will assess the impact of the shortfalls and limiting factors and list the tasks that cannot be accomplished.
g. Step Six: Transportation Feasibility Analysis

Because of the extremely close relationship between steps four, five, and six, the activities of step six have already been discussed in some detail in the transportation planning section. The transportation feasibility analysis step is where the formal analysis of strategic transportation occurs. After the computer simulation, and possibly, several iterations of the transportation steps (planning, shortfall identification, and feasibility analysis) the plan is submitted to the CINC who concludes it is grossly transportation feasible.

h. Step Seven: Time-Phased Force and Deployment Data (TPFDD) Refinement

The TPFDD refinement process normally consists of three sequential refinement phases for forces, logistics (non-unit personnel and sustainment), and transportation. The purpose of the refinement step is to develop a TPFDD file that supports a feasible, adequate, and acceptable OPLAN.

(1) Forces Refinement. The first phase of TPFDD refinement, forces refinement, is performed in coordination with supported and supporting commanders, the Services, the Joint Staff, and other supporting agencies. The forces refinement conferences are normally hosted by the Commander in Chief, U.S. Transportation Command (USCINCTRANSCOM) at
the request of the Joint Staff or the supported commander. The purpose of this phase is to confirm that forces have been sourced and tailored within JSCP, JCS, and Service guidance and to evaluate the adequacy of combat support and combat service support apportionment.

(2) Logistics Refinement. The next phase of TPFDD refinement is conducted primarily by the agencies within each Service responsible for sourcing force and supply requirements, the Defense Logistics Agency, and the CINC components which are under the overall direction of the Joint Staff and/or the supported commander. The logistics refinement conferences are hosted by USCINTRANSOM for the Joint Staff and the supported commander. The purpose of this phase is to confirm that logistics requirements (non-unit personnel and supplies) are sourced per JSCP, JCS, and Service guidance and to assess the adequacy of resources furnished by support planning. These resources will include complete medical and engineering planning.

(3) Transportation Refinement. Transportation refinement is conducted to adjust the flow of forces and supplies identified in the OPLAN to ensure that the OPLAN is transportation feasible and conforms to JSCP, JCS, and Service guidance. The transportation refinement conferences are hosted by USCINTRANSOM who also conducts the
refinement coordination with the Joint Staff, Services, and the CINCs.

At the end of the refinement process the supported commander loads the refined TPFDD file to the JOPES database. Then USTRANSCOM networks the file to appropriate commands worldwide. (JCS Pub. 5-0, p. III-13)

This is the last step before final documentation of the competed OPLAN.

i. Step Eight: Plan Documentation

The final step in the plan development phase is plan documentation. The fully documented plan with its refined TPFDD is an operation plan in completed format (OPLAN).

The documented OPLAN includes a summary, basic plan, a series of detailed annexes, and other administrative documents that describe the CINC’s concept in detail. The basic plan provides a description of the situation, mission, plan of execution, administration and logistics concepts, and delineates the CINC’s plan for command and control.

The annexes furnish an exhaustive treatment of basic subjects such as commands supporting the plan, intelligence, operations, logistics, personnel, and many other vital subjects. The annexes are expanded further by several appendices that give an even more detailed discussion of the CINC’s concept of operations.
Most of the supporting commands and defense agencies that receive copies of the completed OPLAN also have access through their WWMCCS computer terminals to the OPLAN-unique files created by the supported commander. They can review the database using their copies of the TPFDD tape or via the WWMCCS Intercomputer Network (WIN).

4. Plan Review Phase

During the plan review phase the Joint Staff conducts or coordinates a final review of operation plans submitted by the supported combatant commanders.

There are two types of review given operation plans, the concept review and the plan review. The concept review, as discussed earlier in the chapter, is performed on OPLANs following the concept development phase. It is conducted for new operation plans and existing operation plans in which the concept has changed. "The concept review determines whether the scope and concept of operations are sufficient to accomplish the task assigned, assesses the validity of the assumptions, and evaluates compliance with JCS task assignments and guidance." At the concept development stage JCS approves the concept "for continued planning only." (AFSC Pub. 1,p. 6-75)

Plan review is conducted during the plan review phase of OPLAN development. Approval during final review will depend upon whether the plan satisfies the criteria of
acceptability, adequacy, and feasibility as discussed in the second chapter. The plan review is a formal review of the entire operation plan. The result of the final review may be that the plan is either approved; forwarded for continued planning (when there are critical shortfalls which have not been resolved); or disapproved as a result of some major deficiency which may prevent execution of the plan as written, hence, further work is required for approval. With CJCS approval, OPLANs are "effective for execution when directed." (AFSC Pub. 1,p. 6-75)

5. Supporting Plan Phase

In this final phase, the supported commander directs the preparation and submission of plans which support the OPLAN. These plans deal with mobilization, deployment, and employment. As required, the supporting plans are developed by the supporting commanders, supporting unified and specified commanders, or other agencies.

The preparers of the supporting plans have been working on these plans concurrently with the preparation of the OPLAN itself. The supporting plans are usually submitted to the supported commander within 60 days after the CJCS approves the OPLAN which they support. Although the JCS can, on behalf of the CJCS, review any supporting plan, the supported commander is responsible for their
review. However, the CJCS may be asked to resolve issues that arise during the plan review.

6. **TPFDD Maintenance**

The purpose of TPFDD maintenance is to keep a contingency plan as current as possible. Over time, the underlying situation on which the OPLAN was based inevitably changes, and therefore, the response outlined in the OPLAN may be rendered less effective. By routinely making changes necessary to keep the TPFDD up to date, TPFDD maintenance seeks to reduce the amount of modifications required to adapt the TPFDD to the current contingency if it were needed under crisis conditions.

The maintenance is a relatively routine administrative task. Alterations to the TPFDD may be made to reflect changes in sourcing, unit equipment, location, or state of unit readiness. All JPEC members are responsible for providing information to keep the deployment database current. The supported commander has the ultimate responsibility for TPFDD maintenance and is the final approving authority for changes.

The level of effort expended in keeping the file current varies for different stages of the plan. That a plan would be implemented in its entirety without changes is highly improbable. As the operation opens and changes are made in the early stages, events on down the line will
likely be affected. Therefore, planners concentrate their efforts on primarily keeping the initial stages of a plan current. Any intensive effort expended on maintaining the originally-conceived latter stages could be wasted effort. During implementation of a plan later portions will be incrementally updated as the earlier portions are being executed. Ordinarily, the first 30 days of air and sea movement requirements undergo intensive management by the JPEC to ensure database accuracy should the need arise to convert the OPLAN to an executable OPORD in a crisis situation.
IV. CRISIS ACTION PLANNING

The deliberate planning process can take from 18 to 24 months to complete. However, there are situations when there may be only a few days to plan an operation. The planners are then in a situation when the actual movement and employment of U.S. forces is expected to be in the immediate future, and circumstances demand the timely identification of resources in order to ready the force, schedule transportation, and prepare the necessary supplies. It is in a crisis or time-sensitive situation such as this, that the JPEC uses crisis action procedures (CAP).

The focus of this chapter is how the basic planning process described in the last chapter is adapted for planning and executing joint operations under crisis conditions. Unless otherwise noted, the information in this chapter was drawn from Armed Forces Staff College Publication 1, Joint Staff Officer’s Guide, 1991.

The deliberate planning process supports crisis action planning by anticipating potential crises and developing contingency plans in response to them. This contingency planning relies heavily on assumptions about the political and military environment which will exist when it might become necessary to implement the plan. These uncertainties increase the probability that the contingency plan will need
to be modified as a given situation unfolds. Every crisis situation cannot be anticipated. However, as the crisis develops and the assumptions are replaced with facts and reality, the planning accomplished in deliberate planning can facilitate effective decisionmaking and execution planning during these time-sensitive periods. Crisis action procedures are designed to plan and initiate a response within whatever time is allowed by the crisis, regardless of whether there has been previous contingency planning for this particular scenario. If there has been prior deliberate planning, it is considered and exploited whenever possible.

A crisis has been defined as "an incident or situation involving a threat to the United States, its territories, citizens, military forces, and possessions, or vital interests that develops rapidly and creates a condition of such diplomatic, economic, political, or military importance that commitment of U.S. military forces and resources is contemplated to achieve national objectives." (JCS Pub. 5-02.4, p. I-1)

The characteristics of a crisis which are key to the description of crisis action planning in this chapter are: a crisis may occur with little or no warning, it is fast breaking, and accelerated decisions are required, sometimes a crisis in one area will spawn a crisis in another area,
and a commitment of U.S. military forces is being considered for dealing with event.

During a crisis, the situation is undergoing constant change. Flexible procedures are the key to mounting an adequate and feasible military response. These procedures must effectively utilize the time available, emphasize rapid and effective communication, and use previously accomplished deliberate contingency planning whenever possible. Crisis action planning procedures were developed to answer this need. These procedures ensure:

- Following of logical procedures that begin with the recognition of the problem and development of the solution and end with the preparation and execution of the operation order;

- Rapid and effective exchange of information about the situation, its analysis, and alternative responses;

- Timely preparation of COAs for consideration by the NCA; and

- Timely relay of NCA decisions to the combatant commander to permit effective execution.

Crisis action procedures facilitate the transfer of vital information up the chain of command to the NCA and the communication of decisions down the chain. This results in an ability to develop, within a time-constrained planning period, an adequate and transportation-feasible military response. Also, JOPES provides the planning community with the capability of monitoring strategic movement during plan execution.
Just as in deliberate planning, crisis action planning is accomplished in phases. These phases are:

- Situation Development Phase
- Crisis Assessment Phase
- Course of Action Development Phase
- Course of Action Selection Phase
- Execution Planning Phase
- Execution Phase

Figure 4-1 is a summary of the time-sensitive planning phases. Each of the phases begins with an event, such as the receipt of a report or order, and ends with a decision or resolution of the crisis. Although the listing of phases implies a sequence of events, the time constraints of some situations dictate that the process be very flexible. To meet this requirement it permits steps to be done sequentially, concurrently, or even skipped altogether. Even though there are detailed procedures to be followed, they may be abbreviated to speed the process. For instance, decisions may be reached in conference and initially communicated orally rather than by record communication. The tasks to be performed and the time available will determine how much time is spent in each phase.

A. SITUATION DEVELOPMENT PHASE

Organizations of the U.S. government routinely monitor the world situation. While doing this, an event may be
<table>
<thead>
<tr>
<th>PHASE I</th>
<th>PHASE II</th>
<th>PHASE III</th>
<th>PHASE IV</th>
<th>PHASE V</th>
<th>PHASE VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITUATION</td>
<td>CRISIS</td>
<td>COURSE OF</td>
<td>COURSE OF</td>
<td>EXECUTION</td>
<td>EXECUTION</td>
</tr>
<tr>
<td>DEVELOPMENT</td>
<td>ASSESSMENT</td>
<td>ACTION</td>
<td>ACTION</td>
<td>PLANNING</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>DEVELOPMENT</td>
<td>SELECTION</td>
<td></td>
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</tbody>
</table>

**EVENT**

- **EVENT OCCURS WITH POSSIBLE NATIONAL SECURITY IMPLICATIONS**
  - CINC'S REPORT/ASSESSMENT RECEIVED
  - JCS PUBLISHES WARNING ORDER
  - JCS PRESENTS REFINED AND PRIORITIZED COA'S TO NCA
  - JCS RECEIVES ALERT ORDER OR PLANNING ORDER
  - NCA DECIDE TO EXECUTE OPORD

**ACTION**

- **MONITOR WORLD SITUATION**
  - INCREASE AWARENESS
  - INCREASE REPORTING
  - JCS ADVISES ON POSSIBLE MILITARY ACTION
  - NCA-CICS EVALUATION

- **RECOGNIZE PROBLEM**
  - DEVELOP COA'S
  - EVALUATE COA'S
  - CREATE/MODIFY JDS DATABASE
  - CINC ASSIGNS TASKS TO SUBORDINATES BY EVALUATION REQUEST MESSAGE
  - CINC REVIEWS EVALUATION RESPONSE MESSAGES
  - JCS REVIEWS COMMANDER'S ESTIMATE

- **SUBMIT CINC'S ASSESSMENT**
  - CINC PUBLISHES COMMANDER'S ESTIMATE WITH RECOMMENDED COA
  - JCS PREPARES DEPLOYMENT ESTIMATES
  - JCS REVIEW COMMANDER'S ESTIMATE

**OUTCOME**

- **ASSESS THAT**
  - EVENT MAY HAVE NATIONAL IMPLICATIONS
  - REPORT THE EVENT TO NCA/CICS

- **DECIDE TO**
  - DEVELOP MILITARY COA

- **DETERMINE**
  - JCS PUBLISHES COMMANDER'S ESTIMATE WITH RECOMMENDED COA

- **SELECT COA**
  - JCS SELECTS COA RECOMMENDED BY NCA IN ALERT ORDER

- **CRISIS RESOLVED**

**Figure 4-1**  Summary of Time-Sensitive Planning Phases

Source: AFSC Publication 1

*Note: The JDS or Joint Deployment System, which was previously used for crisis action planning, has been replaced by the Joint Operation Planning and Execution System (JOPES). Any reference to JDS in this illustration should be read JOPES vice JDS to reflect current capabilities.*
observed which may have security implications for the U.S. and its interests. If the event is analyzed and determined to present a threat, it is reported to the National Military Command Center (NMCC). Crisis action procedures generally begin once the event is reported to NMCC. The situation development phase consists of four related elements:

- day-to-day monitoring of the situation;
- an event occurs;
- the event is recognized as being a problem; and
- the event is reported.

Situation monitoring involves continuous review and analysis of events occurring worldwide. Sources are many and varied, ranging from strategic intelligence sources, to routine observations by a member of the military attache staff, to television news broadcasts. It is through this situation monitoring that an event comes to the attention of a U.S. official.

An event is an occurrence that is assessed to be out of the ordinary and seen as having the potential to adversely impact U.S. national interests and national security.

The recognition of the event as a problem or potential problem follows from this observation and analysis.

A report of the event may come from various sources but, regardless of the source, the focal point for reporting information crucial to national security is the NMCC in
Washington, D.C. Initially, events may be reported to the NMCC by any means available, however, the most common means are the Critical Intelligence Report (CRITIC) and a message in the OPREP-3 Pinnacle (OPREP-3P) format.

1. Action Taken During Situation Development

The situation development phase focuses generally on the CINC who is responsible for U.S. military action in the theater. The activities of the JPEC during this phase are summarized in Figure 4-2.

Major activities of the combatant command are:

- an assessment by the CINC that the negative potential of the situation warrants higher-echelon awareness;

- reporting to NMCC by OPREP-3P or CRITIC; and

- OPREP-3 Pinnacle/CINC Assessment, the CINC’s assessment of action being considered and/or actions already taken. This is an important step and could be crucial to the CINC’s influencing future decisions in a fast-breaking crisis.

During this phase, the JCS Joint Staff will monitor the situation, request a report from the theater CINC, evaluate the actions being taken by the CINC under the current rules of engagement (ROE), order additional intelligence gathering, if necessary, and advise the NCA as the situation develops.

Other members of the JPEC collect information on the situation, if possible, in an effort to develop an accurate picture of the crisis.
<table>
<thead>
<tr>
<th><strong>NCA</strong></th>
<th></th>
</tr>
</thead>
</table>
| **JCS JOINT STAFF** | • Monitors situation  
  • Evaluates incoming reports  
  • Evaluates actions of CINC |
| **SUPPORTED COMMAND** | • Reports significant event to NMCC  
  • Publishes initial report.  
  nature of crisis  
  forces available  
  major constraints  
  action being taken  
  COAs being considered |
| **SUBORDINATE & SUPPORTING COMMANDS** | • Gather intelligence information  
  • Furnish information and support |
| **USTRANSCOM** | • Monitors developing crisis |
| **SERVICES** | • Monitor developing crisis |

**Figure 4-2  Situation Development Phase**

Source: AFSC Publication 1
2. Exchange of Reports During Situation Development

It is imperative that the initial report, which may be made by anyone, be timely and accurate. Therefore, the CRITIC or OPREP-3 PINNACLE can be issued orally with a record copy to follow. The OPREP-3P may be issued by any commander to report an incident or event where national level interest is indicated. This is followed by the OPREP-3 PINNACLE/CINC ASSESSMENT which is issued by the commander of a unified or specified command. If the initial report of an event is not made by the CINC in the theater where the event occurs, the NMCC will make every effort to establish communications with the CINC and request a report. In this case, the CINC would normally send an OPREP-3 PINNACLE/CINC ASSESSMENT that includes information on:

- the current situation;
- action being taken within the constraints of the current rules of engagement;
- forces readily available;
- expected time for earliest commitment of forces; and
- major constraints on the employment of forces.

3. ADP Support in Situation Development

In the situation development phase the CINC's staff reviews contingency plans. This may be done by using WWMCCS to access the JOPES database which holds all the files for current complete plans. A WIN Teleconference (TLCF) may be
established, if necessary, to allow rapid exchange of information.

The situation development phase of crisis action planning ends when the event is reported and the CINC's assessment is submitted to CJCS and NCA through the NMCC.

B. CRISIS ASSESSMENT PHASE

In the crisis assessment phase, the NCA and JCS analyze the situation to determine the need for preparing a military option to deal with the evolving problem. The primary activities of this phase are increased information gathering and review of available options by the NCA.

The phase begins with the receipt of the CINC's report and assessment. When the CINC has categorized the event as a problem of potential national concern, the detail and frequency of reporting will increase to provide the Chairman and other members of the JCS with enough information to evaluate the situation and dispense sound advice to the NCA.

1. Actions Taken During Crisis Assessment

The focus of this phase is on the Joint Chiefs of Staff and the National Command Authorities. The NCA identifies the national interests at stake, national objectives related to those interests, and options which may achieve those objectives. These options may be diplomatic, political, economic, or military. At this point the NCA makes the decision that a crisis exists and the CINC is to
develop military COAs. The activities of the NCA and JPEC members are summarized in Figure 4-3.

The situation is assessed from the military point of view by the CJCS. This assessment covers operations, logistics, and command and control aspects. The JCS Joint Staff review and evaluate the incoming CINC reports and the Chairman, if the situation warrants, may recommend to the NCA that orders be published to prepare to deploy or actually deploy forces.

The CINC continues to issue status reports, as needed. He assesses the status of assigned and available forces, and takes appropriate military action under current ROE.

Based upon communications from the CINC, the other members of the JPEC continue monitoring the situation. The services may begin activities to improve readiness and sustainability of forces that could be employed and identify Reserve components for possible mobilization. USTRANSCOM improves the disposition and readiness of strategic lift assets.

During the crisis assessment phase, special teams, for dealing with the crisis and its resolution, are assembled at all levels of the JPEC. These teams vary in size and composition and may be called "crisis action teams, crisis response cells, battle staffs, emergency response teams, operation action groups, or operation planning


| NCA | JCS 
JOINT STAFF | SUPPORTED COMMAND | SUBORDINATE & SUPPORTING COMMANDS | USTRANSCOM | SERVICES |
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</thead>
<tbody>
<tr>
<td>• Decide to develop the military COA</td>
<td>• Gives military assessment to NCA</td>
<td>• Continues to report status of situation</td>
<td>• Continue to monitor the crisis</td>
<td>• Reviews status of strategic lift assets</td>
<td>• Evaluate available military force</td>
</tr>
<tr>
<td></td>
<td>• Advises on possible military COAs</td>
<td>• Evaluates event</td>
<td></td>
<td>• Improves disposition &amp; readiness of strategic lift assets</td>
<td>• Act to improve force readiness &amp; sustainability</td>
</tr>
<tr>
<td></td>
<td>• Reviews existing OPLANS &amp; CONPLANs for suitability</td>
<td>• Reviews existing OPLANS &amp; CONPLANs for applicability</td>
<td></td>
<td>• Initiates update of JDS database</td>
<td>• Identify Reserve component requirement</td>
</tr>
<tr>
<td></td>
<td>• Reviews &amp; evaluates reports from CINC &amp; other sources</td>
<td>• Evaluates disposition of assigned and available forces</td>
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### Figure 4-3 Crisis Assessment Phase

Source: AFSC Publication 1

*Note: The JDS or Joint Deployment System, which was the system previously used for crisis action planning, has been replaced by the Joint Operation Planning and Execution System (JOPES). Any reference to JDS in this illustration should be read JOPES vice JDS to reflect current capabilities.*

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groups." (AFSC Pub. 1, p. 7-13) They are formed to handle the increased level of activity in communications, intelligence gathering, monitoring, decisionmaking, and option/COA development, etc. Since crisis action procedures are flexible, the NCA and CJCS have the options of: remaining in this phase with increased reporting and information gathering; returning to the situation development phase and continue to monitor the situation without further planning action; or progressing to the next phase.

2. Exchange of Reports During the Crisis Assessment Phase

On the advice of the CJCS, the NCA may decide to prepare selected units for possible military action at any time during crisis action planning. To reduce the response time of these selected units, unit readiness is heightened by designating alert conditions or ordering a specified deployability posture. Changing the deployment posture of a unit is a strong statement that the U.S. is preparing to conduct military operations. Deployment Preparation Orders and Deployment Orders may be issued. These orders are used to increase or decrease deployability posture, deploy or redeploy forces, establish or disestablish joint task forces and headquarters, or signal U.S. intent to undertake or terminate action. These orders may be issued at any time
during crisis action planning. Both types of orders are specifically authorized by the Secretary of Defense and issued by the CJCS. The level of unit readiness is defined by its deployability posture:

- **Normal (ND)** - no overt action;
- **Increased (ID)** - personnel recalled;
- **Advanced (AD)** - unit packed and positioned;
- **Marshalled (MD)** - unit/transport moved to POE; and
- **Loaded (LD)** - first increment loaded.

The NCA and CJCS may not wish to reveal the United States' intent by increasing deployability and positioning forces. They may see more of a need for secrecy and surprise and balance these against the need to ready selected forces. Operations security is vital and always a consideration.

ADP support for this phase will primarily consist of the establishment of a WIN TLCF between crisis action participants, and JPEC review of the deployment databases.

The crisis assessment phase ends with a decision by the NCA for military options to be developed for their consideration. The NCA decision gives strategic guidance for joint operation planning and may also include specific guidance on the development of COAs (JCS Pub. 5-0, p. III-24). Thus, the CINC's initial assessment of the situation has great influence. That assessment is an early, professional recommendation from the scene. Depending on
the amount of time available, the CINC's assessment of the situation and his capabilities may be the only alternative considered.

C. COURSE OF ACTION DEVELOPMENT PHASE

With the decision having been made by the NCA to develop military options, the CJCS issues a Warning Order directing the development of COAs. The issuance of the Warning Order initiates the third phase of crisis action planning, course of action development. Figure 4-4 is a summary of the activities in this phase.

The CJCS Warning Order is equivalent to the CJCS planning directive in the deliberate planning process. It defines "the objectives, anticipated mission and tasks, pertinent constraints, command relationships, and, if applicable, tentative combat forces available to the command for planning and strategic lift allocations." (JCS Pub. 5-02.4, p. H-2) Normally the Warning Order will either allocate major combat forces and strategic lift available for planning or request the supported commander's assessment of forces and strategic lift required to accomplish the mission. (JCS Pub. 5-02.4, p. H-2)

Further guidance regarding the crisis, such as changes to the rules of engagement or specific directions from the NCA will also be furnished. However, the maximum
<table>
<thead>
<tr>
<th>NCA</th>
<th>- Give guidance to CINC via CJCS</th>
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<tbody>
<tr>
<td>JCS</td>
<td>- Publishes Warning Order</td>
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<td>- establishes command relationships</td>
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<td></td>
<td>- defines tasks, objectives, constraints</td>
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<td>- either allocates forces &amp; lift or requests CINC requirements</td>
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<td>- sets tentative C-day &amp; L-hour</td>
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<td>- directs CINC to develop COAs and submit Commander's Estimate</td>
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<td></td>
<td>- Monitors COA development with JDS*</td>
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<td></td>
<td>- Reviews Commander's Estimate</td>
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<tr>
<td>JOINT STAFF</td>
<td></td>
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<tr>
<td>SUPPORTED COMMAND</td>
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<tr>
<td>- Responds to Warning Order</td>
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<tr>
<td>- Develops and evaluates COAs</td>
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<td>- Uses JDS and FMs to construct COAs</td>
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<td>- Coordinates involvement of subordinates</td>
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<td>- Releases Evaluation Request Message</td>
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<td>- Reviews existing OPLANs for applicability</td>
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<tr>
<td>- Prepares &amp; submits Commander's Estimate to CJCS</td>
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<tr>
<td>SUBORDINATE &amp; SUPPORTING COMMANDS</td>
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<tr>
<td>- Respond to Evaluation Request Message</td>
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<tr>
<td>- Analyze COAs, as directed</td>
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<tr>
<td>- Identify C, CS, CSS forces and generate movement requirement estimates</td>
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<tr>
<td>- Create deployment database in JDS for each COA</td>
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<td>- Coordinate sustainment calculations &amp; movement requirements</td>
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<tr>
<td>- Prepare Evaluation Response Message</td>
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<tr>
<td>USTRANSCOM</td>
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<tr>
<td>- Reviews CINC's COAs</td>
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<tr>
<td>- Activates Crisis Action Team</td>
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<tr>
<td>- Assists in refining requirements</td>
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<tr>
<td>- Prepares deployment estimate for each COA</td>
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<tr>
<td>- Sends deployment estimate to supported commander</td>
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<tr>
<td>SERVICES</td>
<td></td>
</tr>
<tr>
<td>- Monitor COA development</td>
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<td>- Plan for sustainment</td>
<td></td>
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<tr>
<td>- Monitor force readiness</td>
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</tbody>
</table>

Figure 4-4  Course of Action Development Phase

Source: AFSC Publication 1

*Note: The JDS or Joint Deployment System, which was the system previously used for crisis action planning, has been replaced by the Joint Operation Planning and Execution System (JOPES). Any reference to JDS in this illustration should be read JOPES vice JDS to reflect current capabilities.*
flexibility possible will be left to the supported commander to determine how he will accomplish his assigned mission and tasks. (JCS Pub. 5-02.4, p. H-2)

The Warning Order requests a recommended COA from the CINC. If time permits, the CINC will then issue an Evaluation Request Message assigning subordinate and supporting commanders the task of identifying the forces and supplies necessary to support the COAs under consideration. The review of existing OPLANS and CONPLANS may prove useful in speeding this process. After evaluating the alternate COAs and identifying the forces to support the operation, the subordinate and supporting commanders answer the CINC's request with an Evaluation Response Message. At this time, through coordination between the CINC’s Service components and the Service headquarters, sustainment planning begins and the services monitor deployment planning and force readiness.

USTRANSCOM is involved at this stage reviewing the proposed COAs for supportability and preparing deployment estimates for each of the alternative COAs. USCINTRANSCOM then sends the preliminary deployment estimates to the supported commander.

With this information the CINC selects a COA and prepares the final product of this phase, the Commander's Estimate. This estimate is an abbreviated form of the Commander's Estimate created in the concept development
phase of deliberate planning. The Commander's Estimate of crisis action planning differs from that of deliberate planning in that the crisis action estimate is a recommendation to the NCA and not a decision as in deliberate planning (JCS Pub. 5-0, p. III-27). The purpose of the Commander's Estimate is to recommend a COA to the CJCS for consideration by the NCA in their selection of a military course of action.

One of the most critical variables in this phase is movement of the large amount of data involved. It must be transferred among the JPEC members, including the Services and USTRANSCOM, for their use. The WIN and JOPES are the primary means for this exchange of information.

COA development concludes with the issuing of the Commander's Estimate.

D. COURSE OF ACTION SELECTION PHASE

The course of action selection phase begins with the presentation of the recommended COAs to the NCA. When there is no COA which is clearly superior to the others, a ranked list of recommendations may be forwarded for NCA assessment.

1. Action Taken During COA Selection

The focus of activity in this phase is the Chairman of the Joint Chiefs of Staff and the National Command Authorities.
After the CJCS has made his recommendation to the NCA, he may issue guidance to the supported commanders and the other members of the JPEC through a Planning Order. The purpose of the Planning Order is to "direct that execution planning activities begin before formal selection of a COA by the NCA." (JCS Pub. 5-02.4, p. II-6) This is done to speed up execution planning. It does not replace the necessary NCA approval of a COA.

The NCA makes its selection of a COA and directs that execution planning begin. The CJCS then issues an Alert Order to the CINC advising him of the course of action selected. At this time, the CJCS, with the authority of the Secretary of Defense, may choose to issue a Deployment Preparation Order or Deployment Order. As stated during the discussion of the crisis assessment phase, these orders may be issued at any time during CAP. (See Figure 4-5 for a summary of phase activities.)

2. Exchange of Reports During COA Selection

The Planning Order issued by the CJCS may be issued orally, by WIN message, or by the Automatic Digital Network (AUTODIN) to the CINC with copies sent to all JPEC members. Depending on the situation, the contents of the Planning Order may vary, but it should:

- identify forces and resources for planning;
- define the objective, tasks, and constraints;
| **NCA** | - Select COA  
- Direct execution planning |
|---|---|
| **JCS Joint Staff** | - Reviews and evaluates Commander's Estimate  
- Develops additional COAs, as necessary  
- Presents COAs and recommends COA to NCA  
- Issues Planning Order to begin formal execution planning before NCA decision (if necessary)  
  - allocates forces and lift  
  - identifies C-day & L-hour  
- Announces NCA decision  
- Issues Alert Order  
  - describes COA  
  - changes/amplifies guidance in Warning Order  
  - directs execution planning to begin |
| **Supported Command** | - Initiates execution planning on receipt of JCS direction  
- Refines estimates and resolves identified shortfalls |
| **Subordinate & Supporting Commands** | - Continue planning  
- Monitor situation |
| **USTRANSCOM** | - Continues planning  
- Monitors situation |
| **Services** | - Continue planning  
- Monitor situation |

**Figure 4-5 Course of Action Selection Phase**

Source: AFSC Publication 1
contain further planning guidance by the JCS; and

establish a deadline for submitting the OPORD.

The Alert Order issued upon receipt of the NCA course of action decision is a record communication which is very similar to the Planning Order. The exception is that the Alert Order clearly states that planning for the selected COA has been authorized by the Secretary of Defense.

This phase ends when the NCA selects the COA and decides to start execution planning. The Alert Order is issued to announce that decision.

E. EXECUTION PLANNING PHASE

In the execution planning phase the NCA-approved course of action is converted to an OPORD by the combatant commander. This phase is similar in function to the plan development phase of deliberate planning, in that the necessary detailed planning is performed which will allow the execution of the COA when directed by the National Command Authorities. Identification of the actual forces, sustainment, and strategic transportation resources is made and the concept of operations is written in OPORD format.

1. Actions Taken During Execution Planning

Three major tasks comprise the execution planning phase:
The development of an executable OPORD with its supporting TPFDD is accomplished through execution planning. This may be done by modifying an existing OPLAN, expanding an existing CONPLAN, or building the OPORD from scratch when no plan exists (NOPLAN). The amount of prior planning greatly affects the speed with which the OPORD can be developed.

Force preparation focuses on the actual units which have been chosen to participate in the planned operation and their readiness for deployment. The five categories of deployment posture, mentioned in the crisis assessment phase, "portray the status of troops and equipment, the unit's availability to deploy, positioning of units on strategic lift, positioning of transportation support units at intermediate and debarkation ports, etc." (AFSC Pub. 1, p. 7-23) The Secretary of Defense directs changes in deployment posture.

Deployment posture reporting. After receiving the CJCS Alert Order, commanders report the early achievement of, or deviations from, a specified deployability posture by issuing situation reports (SITREPs). Newly identified forces report the time they expect to attain the deployability posture which has been directed.

Emphasis during the execution planning phase is on the CINC and subordinate and supporting commander's tasks as noted in Figure 4-6. They review the Planning or Alert Order to get the latest guidance on forces, timing, constraints, etc. The planning done during COA development is adjusted and updated for any new forces or sustainment requirements, and the sourcing of forces and lift resources is performed. The members of the JPEC are actively engaged in identifying and resolving shortfalls and constraints that exist. This phase of planning results in the preparation of the OPORD by the CINC. The subordinate and supporting commanders then prepare supporting OPORDS.
NCA
- Decide to authorize deployment preparation/deployment

JCS
- Monitors execution planning
- Publishes Deployment Preparation or Deployment Order, as directed
- Evaluates situation and furnishes guidance to continue CAP
- Resolves conflicting materiel priorities & transportation shortfalls

JOINT STAFF
- Converts approved COA into OPORD
- Identifies forces, assigns tasks, and determines movement requirements for early-deploying units
- Validates first increment of movement requirements
- Resolves shortfalls and limitations
- Notifies JDC that force requirements are ready for sourcing

SUPPORTED COMMAND
- Identify early-deploying forces, assign tasks
- Generate movement requirements
- Develop supporting OPORDs
- Begin SORS reporting
- Identify forces
- Schedule movement for self-deploying forces
- Identify shortfalls

SUBORDINATE & SUPPORTING COMMANDS
- Ensures that adequate transportation is available to support approved COA
- Publishes coordinating instructions
- Develops feasible transportation schedules
- May have to focus on first increment of movement
- Coordinates changes caused by conflicts and shortfalls

USTRANSCOM
- Determine mobilization requirements
- Request authorization to mobilize, if necessary
- Calculate sustainment
- Identify shortfalls
- Furnish augmentation forces
- Schedule organic movements
- Improve industrial preparedness
- Begin SORS reporting for identified forces

SERVICES
- Source: AFSC Publication 1

Figure 4-6 Execution Planning Phase
During this phase, CJCS is monitoring the development of the CINC's operation order and resolves any shortfalls that cannot be resolved at a lower level. The CJCS also reviews the completed OPORD for feasibility, adequacy and acceptability, and gives advice, as required, on military matters to the NCA regarding the status of the situation.

Changes to forces and strategic lift that develop from shortfalls and limitations are coordinated by USTRANSCOM. The air and sealift schedules are created concentrating on the initial increment of movements, i.e., seven days by air and 30 days by sealift depending on the distance involved.

The completed OPORD is published by the supported commander with a major force list, instructions for the conduct of operations, and the logistic and administrative plans for support of the operation. Movement data and schedules are entered into the deployment database for access by all members of the JPEC. The OPORD is reviewed by the CJCS and JCS. If it does not conform to the guidance contained in the JCS Alert Order or if circumstances have changed, which require an adjustment in the OPORD, the Joint Chiefs of Staff inform the CINC of the changes that need to be made in the OPORD.

Although very similar to the plan development phase of deliberate planning, execution planning under crisis
action procedures does not end with a step for the formal approval of the final product. The execution planning phase continues until the OPORD is executed or execution planning is terminated by the CJCS. (JCS Pub. 5-0, p. III-3)

2. ADP Support During Execution Planning

During the execution planning phase of crisis action planning, WWMCCS plays a very significant role: communications between JPEC participants continues through the WIN TLCF; the WIN File Transfer Service (FTS) provides rapid, accurate, and secure data transfer; and the WIN TELNET allows access for file updates. The WIN FTS also permits the exchange of entire files of information from one WWMCCS site to another. If access to JOPES computer files is not available to a planning participant, secure voice systems or AUTODIN can be used to exchange essential force and deployment data.

This phase ends with the decision by the NCA to either execute the OPORD, place it on hold, or cancel it pending resolution of the crisis by some means other than military intervention.

F. EXECUTION PHASE

The NCA decision to choose the military option and execute the OPORD opens the execution phase. The Secretary of Defense authorizes the CJCS to issue an Execute Order which directs the CINC to implement the OPORD. This Execute
Order is a record communication which may include further guidance, instructions, or amplifying orders. The combatant commander then issues an Execute Order to subordinate and supporting commanders that directs the execution of their operation orders.

At this point, changes to the original plan may be necessary due to "tactical and intelligence considerations, force and nonunit cargo availability, availability of strategic lift assets, and POE and POD capabilities." (AFSC Pub. 1,p. 7-27) Thus, continuous refinement and adjustment of deployment requirements and schedules, and close coordination and monitoring of deployment activities is necessary. At the time the OPORD is executed, the JOPES deployment database should contain at least the following information:

- sourced combat, combat support, and combat service support requirements for assigned and augmentation forces;
- integrated critical resupply requirements identified by supply category, POD, and LAD; and
- integrated nonunit filler and casualty replacement personnel by numbers and day.

Major changes to deployment plans that are scheduled to occur more than seven days in the future have very little impact on the scheduling process. Changes with effective dates of seven days or less may have a detrimental effect on the timely development of the airlift flow schedule. So, planners concentrate their efforts on the first seven days.
of air movement and the first 30 days of surface movement to avoid having to add last minute requirements that may cause delays in other scheduled movements.

The activities of the JPEC members during the execution phase are outlined in Figure 4-7. In addition to the tasks listed, the USTRANSCOM components validate transportation movements planned for the first increment of forces, adjust deployment flow and reschedule as necessary, and continue to develop schedules for the transportation of subsequent increments.

The rapid exchange of information during the execution phase is critical. The WIN TELNET and WIN TLCF serve to meet this need.

The execution phase ends with the completion or cancellation of the operation.

G. PHASE TIMING

In the preceding discussion, the phases of crisis action planning were presented in an orderly sequence. In a crisis situation this may be far from what actually happens. For instance, the CINC’s assessment from the situation development phase may be the recommended COA developed in the course of action development phase. In some cases, there may be no formal JCS Warning Order issued, and the first record communication the CINC receives is the CJCS...
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>NCA</strong></td>
<td>• Authorize release of Execute Order</td>
</tr>
<tr>
<td><strong>JCS</strong></td>
<td>• Publishes Execute Order to</td>
</tr>
<tr>
<td><strong>JOINT STAFF</strong></td>
<td>• direct deployment &amp; employment of forces</td>
</tr>
<tr>
<td></td>
<td>• set D-day &amp; H-hour (if necessary)</td>
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<td></td>
<td>• convey essential information not contained in the Warning &amp; Alert Orders</td>
</tr>
<tr>
<td></td>
<td>• Monitors deployment &amp; employment of forces</td>
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<td></td>
<td>• Resolves or directs resolution of conflicts</td>
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<tr>
<td><strong>SUPPORTED</strong></td>
<td>• Executes OPORD</td>
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<td><strong>COMMAND</strong></td>
<td>• Monitors force deployment</td>
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<td></td>
<td>• Validates movement requirements in increments</td>
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<td></td>
<td>• Resolves/reports shortfalls</td>
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<td></td>
<td>• Controls employment of forces</td>
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<tr>
<td></td>
<td>• Issues Execute Order to subordinates</td>
</tr>
<tr>
<td></td>
<td>• Updates deployment status on JDS*</td>
</tr>
<tr>
<td><strong>SUBORDINATE</strong></td>
<td>• Execute supporting OPORDs</td>
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<td><strong>&amp; SUPPORTING</strong></td>
<td>• Continue to furnish forces</td>
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<tr>
<td><strong>COMMANDS</strong></td>
<td>• Report movement requirements</td>
</tr>
<tr>
<td><strong>USTRANSCOM</strong></td>
<td>• Controls transportation of forces and supplies</td>
</tr>
<tr>
<td></td>
<td>• Reports progress of deployment to CJCS and CINC</td>
</tr>
<tr>
<td></td>
<td>• Reports lift shortfalls to CJCS for resolution</td>
</tr>
<tr>
<td><strong>SERVICES</strong></td>
<td>• Sustain forces</td>
</tr>
</tbody>
</table>

**Figure 4-7  Execution Phase**

*Source: AFSC Publication 1*

*Note: The JDS or Joint Deployment System, which was the system previously used for crisis action planning, has been replaced by the Joint Operation Planning and Execution System (JOPES). Any reference to JDS in this illustration should be read JOPES vice JDS to reflect current capabilities.*
Planning Order or Alert Order containing the course of action to be used for execution planning. It is possible that the NCA may decide to commit forces shortly after an event occurs, thereby greatly compressing the second through fifth phases. It may be that in a fast-developing crisis situation, the JCS Execute Order may be the first record communication generated by CJCS, all previous communication being voice communication. It is important to realize that no definitive length of time can be associated with any particular phase and that time constraints may require crisis participants to pass information orally, including the decision to commit forces.
V. JOINT OPERATIONS PLANNING AND EXECUTION SYSTEM (JOPES)

The Joint Operation Planning and Execution System (JOPES) is a comprehensive, joint, integrated, conventional command and control (C2) system currently being developed. It is not just an ADP program or system. JOPES is a system of people, policies, procedures and reporting systems supported by automated data processing systems and applications. It is designed primarily to meet the needs of the NCA, CJCS, JCS, Joint Staff, and theater and subordinate CINCs in planning and conducting joint operations. When completed, JOPES will integrate and replace the Joint Operation Planning System (JOPS) and the Joint Deployment System (JDS), the systems formerly used for deliberate and crisis action planning. (AFSC Pub. 1,p. 8-3)

The need for the development of JOPES arises from the inadequacy of JOPS and JDS for meeting today's requirements. With their primary focus on deployment, they do not satisfactorily support mobilization, employment, or sustainment activities. JOPS is chiefly a deliberate planning tool, while the JDS is first and foremost an instrument for crisis action planning. Thus, users were required to use two separate and different systems to perform essentially the same planning tasks. With the new system, deliberate and crisis action planning capabilities
will be provided in a single integrated system. When it reaches full operational capability, JOPES will support mobilization, deployment, employment and sustainment capabilities, and will aid in both the planning and implementation of joint operations. (JOPES Master Plan Segment 1, September 1991, p. 7) Figure 5-1 exhibits the relationship between JOPES functions and those of JOPS (deliberate planning) and JDS (crisis action planning).

The new Joint Operation Planning and Execution System is a set of seven interrelated functions. Five of these functions are operational in nature: Threat Identification and Assessment, Strategy Determination, Course of Action Development, Execution Planning, and Implementation. Two are supporting: Monitoring, and Simulation and Analysis. (JOPES Master Plan Segment 1, September 1991, p. 7) The five operational functions with their inputs and outputs are displayed in Figure 5-2. The relationship between the two supporting functions and the operational functions is illustrated in Figure 5-3.

There will be JOPES applications for monitoring, planning, and executing the four mission areas of mobilization, deployment, employment, and sustainment operations during peace, crisis, or war. The Joint Strategic Planning System (JSPS) and the Planning, Programming, and Budgeting System (PPBS) will receive
Figure 5-1  JOPES-JOPS-CAP Functional Relationship

Source: AFSC Publication 1

*Note: The Joint Deployment System (JDS) supported CAP or crisis action procedures in the same way the JOPS or the Joint Operation Planning System supported deliberate planning.
Figure 5-2  Operational Functions and Major Inputs and Outputs

Source: JOPES Master Plan Segment 1, September 1991
Figure 5-3  JOPES Functions

Source: AFSC Publication 1
collateral support from JOPES in identifying and analyzing force capabilities and requirements. As stated previously, JOPES is a planning and execution tool. It does not cause events to happen. It does provide senior-level decisionmakers with the means to monitor, analyze, and control events during the planning and implementation of joint operations. (JOPES Master Plan Segment 1, September 1991, p. 7)

The goals of JOPES are to:

- support the creation of OPLANS within 45 days of concept approval and the development of OPORDS within three days in a NOPLAN situation;
- enable theater commanders to start, stop, or redirect military operations rapidly and effectively;
- support peacetime, crisis, and wartime planning and execution;
- integrate mobilization, deployment, employment, and sustainment activities;
- standardize policies and procedures for planning in peacetime and crisis situations, making these policies and procedures as similar as possible;
- sustain the rapid development and evaluation of military options and courses of action in single and multitheater operations;
- exploit advances in ADP and communications;
- expedite the development of military estimates of a situation;
- assure the distribution and presentation of timely, accurate, and properly aggregated information; and
- assist planners in identifying resource shortfalls in personnel, transportation, materiels, forces, and medical and civil engineering services. (JOPES Concept of Operations, p. I-2)
A. JOPES FUNCTIONAL AREAS

The seven functional areas of JOPES are presented in this section with brief examples of how each may affect the planning and implementation process, specifically in the mission areas of mobilization, deployment, employment, and sustainment.

1. Threat Identification and Assessment

Threat identification and assessment involves the detection of actual and potential threats to national security, the alerting of decisionmakers of the threats, and the defining of the exact nature of the threats. A primary JOPES activity is the defining of enemy intentions and capabilities. Members at all levels of the JPEC are supported by this function. It provides the information at the national level for strategic planning and the allocation of resources, at the theater level for developing courses of action and detailed planning, and for monitoring and adjusting operations during execution. (AFSC Pub. 1,p. 8-5)

2. Strategy Determination

The JOPES strategy determination application facilitates the development of suitable military options for achieving or maintaining national objectives, or to counter actual or potential threats. The system accommodates databases of criteria for evaluating options through utilization of the system option generation application.
These databases include NCA policy and guidance, diplomatic considerations, rules of engagement, Service doctrine, flight and basing rights, and topological and climatological considerations. This database support will enhance mission analysis and initial strategic planning guidance activities. (JOPES Master Plan Segment 1, September 1991, p. 16)

Significant enhancements over the two previously used systems include improved capabilities to develop the politico-military estimate, develop and test military options for suitability and adequacy, and simulate and analyze the effects of alternative resource allocations. (AFSC Pub. 1, p. 8-6)

3. Course of Action Development

Course of action development functions assist the supported commander in converting initial options into alternative courses of action (COAs) for NCA evaluation. The system allows developing and testing of COAs based on NCA/JCS guidance and allocation of resources. Capabilities of the system include force-on-force analysis, force sustainment, and transportation feasibility analysis. The Commander's Estimate and a concept of operations for the selected COA are the final products of this function. (AFSC Pub. 1, p. 8-6)

The COA development function aids in the documentation of the alternatives considered, of assumptions...
made and of conditions which would necessitate review of the option. Computer models are created to assist planners in the development and evaluation of options, and with the availability of more complete information, the development and evaluation of courses of action. (JOPES Master Plan Segment 1, September 1991, p. 16)

During mobilization, automatic data processing capabilities aid in developing an overall description of the mission and the forces needed to accomplish each of the options under consideration. It helps in defining the numbers and types of forces to be activated, the authorities required, the scheduling involved, and any requirements for increased material production (industrial mobilization).

Within the deployment planning process, COA development begins with the development of a detailed statement of time-phased movement requirements (forces and sustainment) which identifies:

- **who** and **what** needs to be transported;
- **where** they are being transported;
- over **what period of time** they are to be transported; and
- **how** they will be transported. (JOPES Master Plan Segment 1, September 1991, p. 18)

This statement, which is the basis for transportation feasibility requirements, is supported by JOPES feasibility models and ADP. The Joint Operation Planning and Execution System automation aids in the rapid
development of a number of options for meeting deployment requirements; supports optimization of transportation mode selection and/or operation; and in NOPLAN situations, JOPES ADP facilitates the speedy construction of COAs. (JOPES Master Plan Segment 1, September 1991, pp. 18--19)

Sustainment COAs can also be created using course of action development capabilities to analyze tradeoffs among kinds and amounts of accompanying, pre-positioned, and sustaining supplies, along with their movement requirements. The system also generates a description of a sustainment plan in terms of timing and movement requirements. (JOPES Master Plan Segment 1, September 1991, p. 22)

4. Execution Planning

Detail can be added to the selected COA, to complete the OPLAN and develop supporting plans, using the execution planning application. The Joint Operation Planning and Execution System allows "portions of plans to be developed at various locations, electronically transmitted, and merged or compared with other parts of the plan". (JOPES Master Plan Segment 1, September 1991, p. 17) Other capabilities allow the automated maintenance of alternative plans for future reference (JOPES Master Plan Segment 1, September 1991, p. 21). The quickness that JOPES execution planning brings to the planning process alleviates the need to transform all approved COAs to detailed plans as has existed
Automatic Data Processing not only provides the capability of addressing the requirements for deployment, but also redeployment, employment of forces, retrograde movement, NEO and MEDEVAC evacuation movements, and enemy prisoner of war returns. All these requirements must be integrated into the detailed inter-theater airlift and sealift schedules.

Refinements and tailoring of the movement requirements database which includes the deployment TPFDD and mobilization requirements are supported by JOPES automation. As the refinements are made, the data is made available to JPEC planners for use in planning, review, and development of supporting plans or data. Preliminary movement data received from COA development contains type force requirements for personnel, equipment, and sustaining supplies. This information is fed into the system which develops preliminary movement schedules and carrier allocations. This type force data is processed using ADP assets to assist in the selection of actual forces/resources. Once the force requirements have been sourced, USTRANSCOM and its TCCs use the actual unit’s transportation requirements to prepare mobilization and employment movement schedules. The preparation of incremental air and surface movement schedules is computer
JOPES provides automated tools for the preparation and maintenance of detailed support plans. Sustainment is accomplished using JOPES databases containing information on logistics and personnel resources and capabilities. The system possesses the ability to compute sustainment requirements using selective set attrition and consumption factors, locate resources to meet these requirements, and analyze the effects of shortfalls and constraints. (JOPES Master Plan Segment 1, September 1991, pp. 22-23)

5. Implementation

Implementation capabilities support the rapid update of information to accurately reflect the situation unfolding during mobilization. Joint Operation Planning and Execution System ADP facilitates the preparation and transmission of orders/guidance, coordination prior to order transmission, and the merging of plan/option information from on-line databases. Commanders and planners also have the ability to develop statistics for comparing the actual mobilization against planned mobilization in order to make adjustments as necessary. (JOPES Master Plan Segment 1, September 1991, p. 21)

In support of deployment, actual movement and manifest data is entered into the deployment database. This
allows the comparison of actual with planned movements and manifests to discover scheduling deviations and diversions, and differences in manifests. With parameters having been set for permissible deviations, significant deviations are flagged automatically and information can be fed back to an appropriate planning process. Decisionmaking is expedited by rapid calculation of the effect of increasing, decreasing, or redirecting movement assets or adjusting the sequencing of mobilizing and deploying forces and materiel in response to changing requirements. For deployment and employment planning, automated capabilities also support the collection and display of data relating to bases and facilities, staging areas, lines of communication, and overflight and landing rights. (JOPES Master Plan Segment 1, September 1991, pp. 19–20)

This system provides sophisticated tools with which the user can aggregate, order, and analyze large amounts of information on the progress of operations during employment and sustainment operations. These tools aid in deriving a proper assessment of the situation to allow the redirection of operations and actions as necessary. (JOPES Master Plan Segment 1, September 1991, p. 7)

6. Monitoring

The monitoring function is used throughout the deliberate and crisis action planning processes to enable
users of the system to obtain current and accurate information concerning friendly, enemy, and neutral forces and resources. Monitoring supports each of the other JOPES functions. Retrieval of information through monitoring allows consumption data, attrition and utilization data, deployment and procurement status, mobilization status, force status, facilities status, etc., all to be processed by the system. This data primarily originates at the base, unit, and command levels. Data is retrieved and interrelated databases are updated automatically as that data is entered into the system. The power to oversee all essential aspects of military operations and support functions at the level of detail needed, and then assemble this information in formats that assist decisionmaking, is a critical element of the JOPES concept. (AFSC Pub. 1,p. 8-4)

7. Simulation and Analysis

Enhancement of the other JOPES functions is the primary purpose of the simulation and analysis function. This is accomplished through the use of various automated techniques. Examples of the applications of this function include:

- force-on-force assessment (suitability);
- force requirements generation;
- the comparison of capabilities to requirements (feasibility);
- sourcing of force listings;
• mobilization and sustainment requirements generation;

• comparison of planned versus actual events to identify problems, shortfalls and constraints; and

• integration of mobilization, deployment, employment, and sustainment schedules. (AFSC Pub. 1,p. 8-7)

B. DEVELOPMENT OF JOPES

The Joint Operation Planning and Execution System is being developed and released in increments or versions over a period of approximately six years from 1989 to 1994. The first four versions of JOPES allow for full data sharing between previously separate databases, and increases the speed with which accurate plans, estimates and courses of action can be produced. (AFSC Pub. 1,pp. 8-7--8-9) Version 4 of JOPES is expected to be released in March of 1992 (JOPES Master Plan Segment 1, September 1991,p. 10).

The effects of Version 1 through Version 4 on the joint planning process are expected to be:

• provision of a foundation for the continued development of JOPES;

• faster development of Commander's Estimates and COAs;

• an initial integrated deliberate/crisis planning capability with full data sharing between previously separate JOPS and JDS databases; and

• an increased level of confidence for plans, estimates, and COAs. (AFSC Pub. 1,p. 8-9)

Although the precise content of Version 5 through Version 11 has not been determined, the general content has been defined. For these follow-on versions, new
capabilities and improvements to existing capabilities will "improve COA development, analysis, evaluation, and selection; achieve a fully integrated deliberate/crisis planning system; furnish improved execution capabilities via a new integrated database; offer initial threat identification and assessment and strategy determination capabilities; and enhance plan implementation via new comparative analysis tools." Each of the new versions are expected to be released at six month intervals. (AFSC Pub. 1,p. 8-9)

The effects of versions 5 through 11 are expected to be:

- improvement of the capabilities of CINCs to develop, analyze, evaluate, and select COAs;
- improved/enhanced development of forces and transportation feasibility estimates;
- increased capabilities for sustainment analysis, projection of sustainment requirements, determination of where and when support can be furnished, and schedule and monitor activities for providing this support;
- enhanced mobilization planning and execution capability, including the ability to determine whether mobilization is necessary, the capability to analyze advantages, costs, and risks associated with military responses involving mobilization, and the ability to monitor mobilization activities;
- provision of initial NEO planning and execution capabilities;
- full integration of the deliberate and crisis action planning processes;
- a fully integrated and relational database, which will offer a single operation/planning data source, increase data accuracy and improved capacity to access data and produce reports;
interface with DoD Intelligence Information System information for threat analysis;

provision of initial simulation and analysis tools to aid in strategy determination, i.e., determine the most effective threat response, allocation of resources and forces, and development of viable military options;

strengthened OPLAN/OPORD implementation capability; and

enhanced capability to monitor events in near-real-time, to replan as needed, and to adjust the course of operations. (AFSC Pub. 1,p. 8-9--8-11)

Less than half of the JOPES required operational capabilities (ROC) will be achieved with the completion of Version 11. The mission areas of mobilization, deployment, and sustainment will still require considerable work. With the completion of the WWMCCS ADP Modernization (WAM) program, of which JOPES is a part, a follow-on program will be necessary if JOPES development is to continue until the full JOPES ROC is realized. (AFSC Pub. 1,p. 8-11)

C. Joint Operation Planning and Execution System Computer-Assisted Instruction (JOPESCAI)

The Joint Operation Planning and Execution System Computer-Assisted Instruction (JOPESCAI) is a system which fuses instructional aids to emulate the execution, planning, and deployment functions of JOPES. The U.S. Transportation Command contracted for the development of the system and provides training courses in the use of JOPESCAI at its headquarters at Scott Air Force Base and at user sites. (COMBAT,p. 1)
The system works in an IBM PC compatible microcomputer environment, providing extensive tutorials on what functions are available and how they are used to accomplish planning and deployment. The tutorials are available on two levels, a general help function and a detailed screen-specific tutorial which explains the use of hundreds of JOPES screens. The HELP portion provides specific entry information, edit rules, and information on where to get additional help. The tutorial describes the purpose of the display, provides background when applicable, and other information that may be helpful to the user.

The system’s effectiveness is heightened by an interactive glossary. The glossary is available for use at any point in the system, with a single keystroke. It may be viewed by abbreviation or expanded term. Definitions for the terms are available as well.

JOPESCAI is an effective training tool for a complex system utilized by all four Services and joint commands. It will continue to evolve as JOPES itself is updated and expanded. Appendix C is a user’s manual for the JOPESCAI system.
VI. FUTURE SYSTEMS

In addition to the development of the Joint Operation Planning and Execution System (JOPES), other planning systems are being developed and programs for the improvement of existing systems are also being initiated. All of this activity is intended to increase the efficiency and effectiveness of the joint planning process. This chapter will furnish a brief description of some of the most significant of the new systems and improvement programs. These include the WWMCCS ADP Modernization (WAM) program, Global Transportation Network (GTN), Auto Force Generator (AFG), Force Module Logistics Sustainability Model (FMLSM), Transportation Coordinators' Automated Information For Movements System (TC-AIMS), Wartime Host Nation Support Information Management System (WHNSIMS), Force Augmentation Planning and Execution System (FAPES), and Modern Aids to Planning Program (MAPP). The information in this chapter was taken from the Armed Forces Staff College Publication 1, Joint Staff Officer's Guide, 1991.

A. WWMCCS ADP MODERNIZATION (WAM) PROGRAM

Because existing Worldwide Military Command and Control System (WWMCCS) automatic data processing does not meet current operational requirements and cannot readily
accommodate the addition of new capabilities, the WWMCCS ADP Modernization (WAM) program was introduced. The purpose of the program is to modernize WWMCCS Standard ADP and its directly-related telecommunications. For future evolution of the WWMCCS system, there is a need to restructure around modern software capabilities, such as the latest database management systems and intelligent workstations. This need to modernize is further underscored by the high cost of maintaining the current standard systems.

The current WWMCCS Standard ADP community consists of numerous CINC/Service/agency sites, each having one or more Honeywell H6000 or related processors which have been upgraded to the Distributed Processing System-8 (DPS-8). The present system performs a limited number of applications that are "standard throughout the community." (AFSC Pub. 1,p. 8-12) In addition, each site performs many functions specifically designed for their particular CINC/Service/agency.

The ultimate goal of WAM is to improve the ability of the United States to formulate effective, credible, executable military responses to world events that threaten our national interests. Improvements to the system will be achieved through the application of modern information systems tools and technology to the tasks of planning, mobilizing, deploying, employing, sustaining, and monitoring conventional military operations. It will also interface,
to the extent necessary, with the Nuclear Planning and Execution System and the Tactical Warning and Attack Assessment System.

The modernized WWMCSS ADP system is intended to redress existing deficiencies in current command and control systems, i.e., lack of efficient standard force status monitoring capability, lack of automated support for NOPLAN and multiplan situations, and lack of an on-line plan modification system. This will be done through enhanced information processing, storage, retrieval, reporting, and display functions.

In the modernization of the applications software in WWMCCS, priority is being given to the fielding of JOPES capabilities. Modernization will initially target those areas which allow operational users to take advantage of the new JOPES system. Thus, the principal focus of the WAM effort is on JOPES requirements. These requirements will be satisfied through new applications software, new procedures, an integrated database, and improvement of the installed WWMCCS Standard ADP baseline. The program will initially concentrate on the crisis, deliberate, and conventional deployment planning and execution tasks.

The Service-, agency-, and command-unique applications in WWMCCS ADP will be effected by WAM. Each Service and agency has its own modernization effort for its unique applications. The Joint WAM program is related to the
Service-, agency-, command-unique programs through qualification of hardware and software elements and by furnishing an architectural roadmap to an open system and interoperability.

The need undoubtedly exists for an agile and responsive joint planning and execution system. It must be an integrated system which will support planning, monitoring, and execution activities for peacetime, crisis and wartime. It is imperative that the system include procedures and ADP support to ensure the timely execution of senior leaders' decisions, and rapid achievement of strategic force concentrations where necessary, while allowing flexibility in the allocation of resources. Currently, WAM-JOPES offers the best option to attain agility through an integrated system.

B. GLOBAL TRANSPORTATION NETWORK (GTN)

The global responsibilities of USTRANSCOM demand a responsive transportation management system. The Global Transportation Network (GTN) is being developed by USTRANSCOM to meet this need. It is not another transportation database. The GTN is a network of systems which has been described as a capability that integrates "hardware, software, and communications, as well as, people, policies, and procedures." (AFSC Pub. 1,p. 8-15) That is, GTN ties together the existing transportation databases; it
does not create a new one. It is a means of accessing the collection of command, control, computer, and communications (C4) systems that sustain global transportation management. These C4 systems can be divided into three functional categories:

- first, the systems needed to support planners in gathering transportation requirements of the supported CINCs, to generate operational plans, and to evaluate plan effectiveness;

- second, the command and control systems that primarily support mobilization and deployment; and

- third, the systems that support in-transit visibility (ITV). In-transit visibility is the near-real-time monitoring/tracking of unit and nonunit cargo and personnel from transportation origin to destination. USTRANSCOM has focused most of its efforts in this area during the development of both the demonstration and operational prototypes.

The ITV prototype was built around the questions that might be asked by the CINC, such as:

- Where are my units/amunition/critical items?

- When and where will they arrive?

- Are there special handling problems associated with them?

- What's on a ship/plane? (manifest information) and

- What's in a specific container?

All of this information is vital to a commander who is planning or executing an operation. With this requirement in mind, the GTN/ITV prototype is directed toward the CINC level of operation and planning.
When complete, the Global Transportation Network will serve as the primary source of transportation information for JOPES providing transportation scheduling and movement data. GTN is being developed to serve as the sole point of interface to JOPES for all the Transportation Component Commands and the Service transportation and scheduling systems. (JOPES Master Plan Segment 4, September 1991, p. 13)

C. AUTO FORCE GENERATOR (AFG)

The Auto Force Generator (AFG) gives the planning community an automated planning capability to build Time-Phased Force Deployment Data on a stand alone workstation. AFG is designed to encompass the unique planning procedures of each of the U.S. Armed Forces. Planners can select combat forces and tailor corresponding combat support and service support forces through a "rules-driven" automated software system to accommodate any global, regional, or contingency scenario. As an expert system, the heart of AFG is the "rules." Each functional planner, through a series of templates, can develop sets of rules that represent the thought process used in "packaging" support forces to build a TPFDD that fits any scenario. These sets of rules include, but are not limited to, combat support packaging rules, command-unique rules, theater-specific rules, priority rules, and distribution rules.
The Auto Force Generator has been fully developed as a prototype and all CINCs and their components possess and use it. It was developed by JCS to support the employment mission area. AFG is to be integrated into JOPES Version 5. (JOPES Master Plan Segment 3, September 1991, p. A-7)

D. **FORCE MODULE LOGISTICS SUSTAINABILITY MODEL (FMLSM)**

The Force Module Logistics Sustainability Model (FMLSM) is a system being developed by JCS to calculate the munitions sustainability of forces by linking the principal factors affecting consumption and comparing the results to assets availability. Critical munitions sustainability for both level-of-threat and level-of-effort critical munitions (essential sustainability items) may be determined. Initial calculations are made using default data, which may then be overridden by user-entered data. FMLSM is designed to interface with JOPES; the calculations are based on data obtained from the JOPES TPFDD (JOPES Master Plan Part 2, December 1991, p. II-18).

The major inputs used in determining consumption are: force composition and armament, weapon inventories and expenditures per role, sortie rates, intensity, attrition, battle damage repairable, substitute munitions, threat profiles (including probability of kill and load), and environment. Assets are then entered and compared to consumption for sustainability determination.
E. TRANSPORTATION COORDINATORS' AUTOMATED INFORMATION FOR MOVEMENTS SYSTEM (TC-AIMS)

An automated capability to support rapid deployment of U.S. forces from CONUS bases and to provide accurate and timely data to manage that deployment process is required by the Department of Defense. The Transportation Coordinators' Automated Information Movement System (TC-AIMS) achieves this by improving base-level transportation activities through the application of proven modern automation techniques. TC-AIMS is the generic term for the computer hardware, software, procedures, and systems used to automate the processes of planning, organizing, coordinating, and controlling unit-related deployment activities.

Each Service is progressing with their efforts to develop their own unique system to accomplish the purposes of TC-AIMS. Each Service-unique system will interface with the JOPES system through the Global Transportation Network (JOPES Master Plan Segment 4, September 1991, p. A-1-65).

The following improvements will be the result of the completion of TC-AIMS development:

- Unit-level deployment readiness will increase because of the constant updates to the database.
- Automation of transportation documentation will promote unit responsiveness to set or changed plans.
- Local C2 will improve with the ad hoc query and automatic reporting capabilities of the system.
The responsiveness of USTRANSCOM will be enhanced because of the availability of current, detailed transportation requirements early in execution planning.

The major command will have more precise TPFDD refinements and easier TPFDD maintenance due to the availability of more current information, automation of the processes, and more timely deployment coordination.

F. WARTIME HOST NATION SUPPORT INFORMATION MANAGEMENT SYSTEM (WHNSIMS)

Having the automated capability to track and manage host nation support information is the objective of the Wartime Host Nation Support Information Management System (WHNSIMS). It summarizes data in common units of measure that can be sorted for specifics in the areas of combat support, combat service support, facilities, and services. The use of WHNSIMS enhances the visibility of wartime host nation support (WHNS) capabilities for planning and execution purposes. Knowing about and having this host nation support might possibly reduce early strategic sealift requirements. It could also improve coalition logistics cooperation and support. Use of the system could facilitate incorporation of host nation support into the OPLAN and meet the WHNS information requirements of the JPEC.

In order to achieve these objectives WHNSIMS will meet the following performance specifications:

- ensure the identification, availability, and timeliness of wartime host nation support;
form an automated source of WHNS information for use by functional area managers and joint operation planners;

perform as a management tool for WHNS negotiators; and

furnish an automated source of wartime host nation support information for senior managers.

WHNSIMS is being developed by JCS and it is anticipated that the system will be integrated into JOPES Version 6.


G. FORCE AUGMENTATION PLANNING AND EXECUTION SYSTEM (FAPES)

The Force Augmentation Planning and Execution System (FAPES) is being developed JCS as a planning and execution system for military mobilization. This system is designed to determine whether force augmentation is necessary to satisfy the time-phased requirements specified in deployment, employment, and sustainment for both deliberate and crisis action planning. To compile force augmentation information, FAPES requires data from numerous systems, including interfaces with JOPES and the Status of Resources and Training System (SORTS) on the WWMCCS network. The development of FAPES into a full scale working model is now in the planning stages.

H. MODERN AID TO PLANNING (MAPP)

The Modern Aid to Planning Program (MAPP) is a JCS and CINC initiative to assist planners in improving the quality
of joint operation plans through the acquisition of state-of-the-art hardware and employment of modern simulation analysis software. A critical void exists in the joint planning process. The CINCs have not had the analytical tools available to assist in analyzing force employment—the critical phase from which all other requirements stem. Filling this void is the aim of MAPP. It permits the analysis of alternative COAs and force mixes to determine the sensitivity of assumptions in executing courses of action. MAPP also allows the CINCs to better identify and document critical warfighting requirements. It is designed to give the CINCs and JCS an efficient, modern joint planning and analysis aid for improving joint operation planning. The Modern Aids to Planning Program has both deliberate and crisis action applications.

MAPP is comprised of war games, simulation models, and support software that:

- give wargaming capability to the CINC;
- field a simulation and analysis system for the Joint Operation Planning and Execution System; and
- furnish a basis for decisions about resource procurement and allocation.

The hardware and software for MAPP have been fielded at all combatant command headquarters. The focus for future developments of the system will continue to be on joint analysis to support CINC requirements.
The systems and programs presented here are not a comprehensive list of the ADP systems designed to support planning and execution which are presently being developed or improved. However, they are representative of the efforts being undertaken to achieve the ultimate goal of having a full range of ADP support for the entire scope of joint operation planning.
VII. SUMMARY

Joint operation planning refers to those operational planning activities which deal with the preparation of joint operation plans and orders. It is primarily the responsibility of the Chairman of the Joint Chiefs of Staff and the commanders in chief of the unified and specified commands with the cooperation of other members of the Joint Planning and Execution Community. (JCS Pub. 5-0, p. I-4)

Joint operation planning can be global in nature or it can be specific to a particular geographic region. It can be extremely detailed or just a concept of the operation being considered. Planning can be performed under relatively relaxed time constraints or in a high-pressure crisis environment. Plans may be based on the requirements needed to meet the threat or based on meeting the threat, as best you can, with the capabilities already possessed. However, one thing is certain, joint operation planning is almost always a complex endeavor. The deliberate and crisis action planning processes and sophisticated ADP support are fundamental to the production of acceptable, adequate, and feasible joint operation plans, which are the key to achieving and maintaining our national objectives.

The Joint Operation Planning and Execution System (JOPES) and the Worldwide Military Command and Control...
System (WWMCCS) provide the planning process structure, automated data processing support, and rapid, secure communications capabilities. Working together, these two systems form the cornerstone of the joint operation planning and execution process. Without the capabilities they provide, the efficient and effective mobilization, deployment, employment, and sustainment of forces would be virtually impossible. This is particularly true given the global responsibilities of the United States and the current dynamic political environment.

Preparatory training which emulates real-life potential contingencies is an essential component of any successful military operation. JOPESCAI is an integral part of the training of those involved in the joint planning process. As the evolution of JOPES continues, JOPESCAI must be updated in order to maintain the realism needed to equip planners with the tools necessary to perform effective planning even under time-sensitive conditions.

Joint operation planning and execution is a complex and vital process. This thesis has attempted to provide increased understanding of this process and the systems which support it.
APPENDIX A: ACRONYMS

The following is a list of acronyms frequently used in joint operation planning and execution. Reference: Armed Forces Staff College Publication 1, Joint Staff Officer's Guide, 1991.

AD advanced deployability **
ADP automatic data processing
AFG Auto Force Generator
AFSC Armed Forces Staff College
ALCE Airlift Control Element **
ALD available-to-load date **
AMOPS Army Mobilization Operations Planning System
ANMCC Alternate National Military Command Center
APF afloat pre-positioning force
APORTS Aerial Ports and Air Operating Bases File
ASSETS Transportation Assets File
AUTODIN Automatic Digital Network
C2 command and control
C3 command, control, and communications **
C4 command, control, communications, and computers
CAI computer-assisted instruction
CAP Crisis Action Procedures **
CAT crisis action team
CB chemical, biological
CBBLs hundreds of barrels (bulk oil)
CESP Civil Engineering Support Plan **
CESPG Civil Engineering Support Plan Generator **
CHSTR Characteristics of Transportation Resource File
CINC commander in chief (of unified or specified command)
CINCSAC Commander in Chief, Strategic Air Command
CINCSOC Commander in Chief, Special Operations Command
CJCS Chairman of the Joint Chiefs of Staff
COA course of action **
CONPLAN operation plan in concept format **
CONUS Continental United States
CRD CINCs required date **

** Term is defined in Appendix B.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRITIC</td>
<td>Critical Intelligence Report</td>
</tr>
<tr>
<td>CS</td>
<td>combat support **</td>
</tr>
<tr>
<td>CSS</td>
<td>combat service support **</td>
</tr>
<tr>
<td>CUC</td>
<td>common user contract</td>
</tr>
<tr>
<td>DEST</td>
<td>destination **</td>
</tr>
<tr>
<td>DLA</td>
<td>Defense Logistics Agency</td>
</tr>
<tr>
<td>DoD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DPS-8</td>
<td>Distributed Processing System-8</td>
</tr>
<tr>
<td>EAD</td>
<td>earliest arrival date (at POD) **</td>
</tr>
<tr>
<td>EDC</td>
<td>estimated date of completion of loading (at POE)</td>
</tr>
<tr>
<td>EDD</td>
<td>earliest departure date or earliest delivery date **</td>
</tr>
<tr>
<td>FAD</td>
<td>feasible arrival date **</td>
</tr>
<tr>
<td>FAPES</td>
<td>Force Augmentation Planning and Execution System</td>
</tr>
<tr>
<td>FM</td>
<td>force module **</td>
</tr>
<tr>
<td>FMI</td>
<td>force module identifier</td>
</tr>
<tr>
<td>FML</td>
<td>Force Module Library</td>
</tr>
<tr>
<td>FMLSN</td>
<td>Force Module Logistics Sustainability Model</td>
</tr>
<tr>
<td>FMS</td>
<td>Force Module Subsystem</td>
</tr>
<tr>
<td>FORSCOM</td>
<td>Forces Command</td>
</tr>
<tr>
<td>FRG</td>
<td>Force Requirements Generator **</td>
</tr>
<tr>
<td>FRN</td>
<td>Force Requirement Number **</td>
</tr>
<tr>
<td>FTS</td>
<td>File Transfer Service</td>
</tr>
<tr>
<td>GEOFILE</td>
<td>Standard Specified Geographic Location File</td>
</tr>
<tr>
<td>GTN</td>
<td>Global Transportation Network</td>
</tr>
<tr>
<td>HOME</td>
<td>home</td>
</tr>
<tr>
<td>ID</td>
<td>increased deployability posture **</td>
</tr>
<tr>
<td>ILOC</td>
<td>intermediate location **</td>
</tr>
<tr>
<td>ITV</td>
<td>In-transit Visibility</td>
</tr>
<tr>
<td>J-1</td>
<td>joint manpower/personnel staff</td>
</tr>
<tr>
<td>J-2</td>
<td>joint intelligence staff</td>
</tr>
<tr>
<td>J-3</td>
<td>joint operations staff</td>
</tr>
<tr>
<td>J-4</td>
<td>joint logistics staff</td>
</tr>
<tr>
<td>J-5</td>
<td>joint deployment staff</td>
</tr>
<tr>
<td>J-6</td>
<td>joint command, control, and communications staff</td>
</tr>
<tr>
<td>JCS</td>
<td>Joint Chiefs of Staff **</td>
</tr>
<tr>
<td>JDS</td>
<td>Joint Deployment System</td>
</tr>
<tr>
<td>JOPES</td>
<td>Joint Operation Planning and Execution System **</td>
</tr>
<tr>
<td>JOPS</td>
<td>Joint Operation Planning System</td>
</tr>
<tr>
<td>JPEC</td>
<td>Joint Planning and Execution Community **</td>
</tr>
<tr>
<td>JSCP</td>
<td>Joint Strategic Capabilities Plan **</td>
</tr>
<tr>
<td>JSPS</td>
<td>Joint Strategic Planning System **</td>
</tr>
<tr>
<td>JSTPS</td>
<td>Joint Strategic Target Planning Staff</td>
</tr>
</tbody>
</table>

** Term is defined in Appendix B

168
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JTF</td>
<td>Joint Task Force **</td>
</tr>
<tr>
<td>LAD</td>
<td>Latest Arrival Date (at POD) **</td>
</tr>
<tr>
<td>LCE</td>
<td>Logistics Capability Estimator</td>
</tr>
<tr>
<td>LCN</td>
<td>load classification number</td>
</tr>
<tr>
<td>LD</td>
<td>loaded deployability posture **</td>
</tr>
<tr>
<td>LOGSAFE</td>
<td>Logistics Sustainability Analysis Feasibility Estimator</td>
</tr>
<tr>
<td>MAC</td>
<td>Military Airlift Command</td>
</tr>
<tr>
<td>MAPP</td>
<td>Modern Aids to Planning Program</td>
</tr>
<tr>
<td>MCCP</td>
<td>Marine Corps Capabilities Plan</td>
</tr>
<tr>
<td>MD</td>
<td>marshalled deployability posture **</td>
</tr>
<tr>
<td>MEDEVAC</td>
<td>medical evaluation</td>
</tr>
<tr>
<td>MODE</td>
<td>transportation mode</td>
</tr>
<tr>
<td>MPM</td>
<td>Medical Planning Module **</td>
</tr>
<tr>
<td>MPS</td>
<td>maritime pre-positioning ships</td>
</tr>
<tr>
<td>MRG</td>
<td>Movements Requirements Generator **</td>
</tr>
<tr>
<td>MSC</td>
<td>Military Sealift Command</td>
</tr>
<tr>
<td>MTMC</td>
<td>Military Transportation Management Command</td>
</tr>
<tr>
<td>MTONS</td>
<td>measurement tons</td>
</tr>
<tr>
<td>NAVSPEWARCOM</td>
<td>Naval Special Warfare Command</td>
</tr>
<tr>
<td>NBC</td>
<td>nuclear, biological, and chemical</td>
</tr>
<tr>
<td>NCA</td>
<td>National Command Authorities **</td>
</tr>
<tr>
<td>NCMP</td>
<td>Navy Capabilities and Mobilization Plan</td>
</tr>
<tr>
<td>ND</td>
<td>normal deployment posture **</td>
</tr>
<tr>
<td>NEACP</td>
<td>National Emergency Airborne Command Post</td>
</tr>
<tr>
<td>NEO</td>
<td>noncombatant evacuation operation</td>
</tr>
<tr>
<td>NMCC</td>
<td>National Military Command Center</td>
</tr>
<tr>
<td>NMCS</td>
<td>National Military Command System **</td>
</tr>
<tr>
<td>NOPLAN</td>
<td>no plan available or prepared **</td>
</tr>
<tr>
<td>NPG</td>
<td>Nonunit Personnel Generator</td>
</tr>
<tr>
<td>NSC</td>
<td>National Security Council</td>
</tr>
<tr>
<td>OPCON</td>
<td>operational control **</td>
</tr>
<tr>
<td>OPLAN</td>
<td>operation plan in complete format **</td>
</tr>
<tr>
<td>OPORD</td>
<td>operation order **</td>
</tr>
<tr>
<td>OPREP-3</td>
<td>message format used for event/incident report</td>
</tr>
<tr>
<td>ORIGIN</td>
<td>origin **</td>
</tr>
<tr>
<td>PID</td>
<td>plan identification number</td>
</tr>
<tr>
<td>POD</td>
<td>port of debarkation **</td>
</tr>
<tr>
<td>POE</td>
<td>port of embarkation **</td>
</tr>
<tr>
<td>POL</td>
<td>petroleum, oils, and lubricants</td>
</tr>
<tr>
<td>POMCUS</td>
<td>pre-positioned organizational materiel, configured to unit sets</td>
</tr>
<tr>
<td>PORTS</td>
<td>Port Characteristics File</td>
</tr>
<tr>
<td>POS</td>
<td>port(s) of support **</td>
</tr>
<tr>
<td>POSF</td>
<td>Ports of Support File</td>
</tr>
<tr>
<td>PPBS</td>
<td>Planning, Programming, and Budgeting System</td>
</tr>
</tbody>
</table>

** Term defined in Appendix B.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREPO</td>
<td>pre-positioned stocks</td>
</tr>
<tr>
<td>PWRMS</td>
<td>pre-positioned war reservor materiel stocks</td>
</tr>
<tr>
<td>RDD</td>
<td>required deliver date (at DEST) **</td>
</tr>
<tr>
<td>RLD</td>
<td>ready-to-load date **</td>
</tr>
<tr>
<td>ROC</td>
<td>Required Operational Capability</td>
</tr>
<tr>
<td>ROE</td>
<td>rules of engagement</td>
</tr>
<tr>
<td>SIOP</td>
<td>Single Integrated Operational Plan</td>
</tr>
<tr>
<td>SITREP</td>
<td>situation report</td>
</tr>
<tr>
<td>SORTS</td>
<td>Status of Resources and Training System</td>
</tr>
<tr>
<td>STONS</td>
<td>short tons</td>
</tr>
<tr>
<td>TC-AIMS</td>
<td>Transportation Coordinator's Automated Information for Movement System</td>
</tr>
<tr>
<td>TCC</td>
<td>Transportation Component Command</td>
</tr>
<tr>
<td>TELNET</td>
<td>Telecommunications Network</td>
</tr>
<tr>
<td>TFE</td>
<td>Transportation Feasibility Estimator **</td>
</tr>
<tr>
<td>TLCF</td>
<td>WIN Teleconference</td>
</tr>
<tr>
<td>TPFDD</td>
<td>Time-Phased Force and Deployment Data **</td>
</tr>
<tr>
<td>TUCHA</td>
<td>Type Unit Characteristics File or Type Unit Data File **</td>
</tr>
<tr>
<td>USCINCENT</td>
<td>Commander in Chief, U.S. Central Command</td>
</tr>
<tr>
<td>USCINCLANTFLT</td>
<td>Commander in Chief, U.S. Atlantic Fleet</td>
</tr>
<tr>
<td>USCINCPAC</td>
<td>Commander in Chief, U.S. Pacific Command</td>
</tr>
<tr>
<td>USCINCTRANSCOM</td>
<td>Commander in Chief, U.S. Transportation Command</td>
</tr>
<tr>
<td>USSPACECOM</td>
<td>United States Space Command</td>
</tr>
<tr>
<td>USTRANSCOM</td>
<td>United States Transportation Command</td>
</tr>
<tr>
<td>VIP</td>
<td>visual information projection</td>
</tr>
<tr>
<td>WAM</td>
<td>WWMCCS ADP Modernization</td>
</tr>
<tr>
<td>WHNSIMS</td>
<td>Wartime Host Nation Support Information Management System</td>
</tr>
<tr>
<td>WIN</td>
<td>WWMCCS Intercomputer Network</td>
</tr>
<tr>
<td>WIS</td>
<td>WWMCCS Information System</td>
</tr>
<tr>
<td>WMP</td>
<td>War and Mobilization Plan (U.S. Air Force)</td>
</tr>
<tr>
<td>WWMCCS</td>
<td>Worldwide Military Command and Control System</td>
</tr>
</tbody>
</table>

** Term is defined in Appendix B.
APPENDIX B: DEFINITIONS

The definitions in Appendix B are quoted from Armed Forces Staff College (AFSC) Publication 1 Joint Staff Officer's Guide, 1991, unless otherwise noted.

Acceptability  Operation plan review criterion that evaluates whether the contemplated course of action is worth the cost in manpower, materiel, and time involved; is consistent with established ethical standards; and is politically supportable. (JCS Pub. 5-0)

Adequacy  Operation plan review criterion that evaluates the scope and concept of planned operations for sufficiency to accomplish the task assigned.

Aerial Port  An airfield that has been designated for the sustained air movement of personnel and materiel and to serve as an authorized port for entrance into (an area) or departure from the country where it is located.

Air Movement  Air Transport of units, personnel, supplies, and equipment, including airdrops and air landings.

Airlift Control Element (ALCE)  A functional airlift organization, usually provisional, established to provide support to air elements at an airfield. Normally includes operations, aircraft maintenance, and aircraft transportation functions which support airlift locations where required command and control or mission support functions are nonexistent or require augmentation. (JOPESCAI Software)

Alert Order  A crisis action planning directive issued by the Chairman of the Joint Chiefs of Staff that provides essential guidance for planning and directs the initiation of execution planning.
following a decision by the NCA that U.S. military forces may be required. (JCS Pub. 5-0)

<table>
<thead>
<tr>
<th>Alert Status</th>
<th>The level of preparedness directed by competent authority to be attained by deploying units. (JCS Pub. 5-02.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation</td>
<td>The resources furnished to the commander of a unified or specified command by the Chairman of the Joint Chiefs of Staff for execution planning or actual execution.</td>
</tr>
<tr>
<td>Apportion</td>
<td>To make resources available to the commander of a unified or specified command for deliberate planning. Apportioned resources are used in the development of operation plans and may be more or less than those allocated for execution planning or actual execution.</td>
</tr>
<tr>
<td>Assembly Area</td>
<td>An area where a command is assembled in preparation for future action.</td>
</tr>
<tr>
<td>Assigned Forces</td>
<td>Forces in being that have been placed under the combatant command or operational control of a commander.</td>
</tr>
<tr>
<td>Assumption</td>
<td>A supposition about the current situation or a presupposition about the future course of events, either or both assumed to be true in the absence of positive proof, necessary to enable the commander in the process of planning to complete an estimate of the situation and make a decision on the course of action.</td>
</tr>
<tr>
<td>Augmentation Forces</td>
<td>Forces to be transferred to the operational control of a supported commander during the execution of an operation.</td>
</tr>
<tr>
<td>Available-To-Load Date (ALD)</td>
<td>A date specified for each unit in a TPFDD indicating the day planned as the earliest time the requirement can begin loading at the POE.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Base Case</td>
<td>A method of planning that attempts to resolve, in advance, possible conflicts over use of resources in more than one OPLAN.</td>
</tr>
<tr>
<td>Basic Load</td>
<td>The quantity of supplies required to be on hand within, and that can be moved by, a unit or formation. It is expressed according to the wartime organization of the unit or formation and maintained at the prescribed levels.</td>
</tr>
<tr>
<td>C-Day</td>
<td>The unnamed day on which the first movement from any ORIGIN in support of a specific OPLAN/OPORD begins or is to begin. The deployment may be movement of troops, cargo, weapon systems, or a combination of these elements using any or all types of transportation. For execution, the actual C-Day is established under the authority and direction of the Secretary of Defense.</td>
</tr>
<tr>
<td>Campaign</td>
<td>A series of related military operations aimed to accomplish a strategic or operational objective within a given time and space. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td>Capabilities Plan</td>
<td>Planning that attempts to meet the threat based on the forces and support that have been funded by Congress in the current budget cycle. This level of forces, equipment, and supplies is available now or expected to be available in this planning cycle.</td>
</tr>
<tr>
<td>Cargo</td>
<td>Commodities and supplies in transit.</td>
</tr>
<tr>
<td>Casualty</td>
<td>Any person who is lost to the organization by reason of having been declared dead, wounded, injured, diseased, interned, captured, retained, missing, missing in action, beleaguered, besieged, or detained.</td>
</tr>
<tr>
<td>CINC's Required Date (CRD)</td>
<td>The original date specified by the CINC for arrival of forces or cargo at the destination; shown in the TPFDD to assess the impact of later arrival.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Civil Engineering Support Plan (CESP)</td>
<td>The part of an operation plan that deals with the construction, improvement, or repair of resources and facilities in the area of operations.</td>
</tr>
<tr>
<td>Combatant Command</td>
<td>One of the unified or specified commands established by the President. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td>Combatant Commander</td>
<td>A commander in chief of one of the unified or specified commands established by the President. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td>Combat Forces</td>
<td>Forces whose primary missions are to participate in combat.</td>
</tr>
<tr>
<td>Combat Service Support (CSS)</td>
<td>The assistance furnished to operating forces primarily in the fields of administrative services, chaplain services, civil affairs, finance, legal services, health services, military police, supply, maintenance, transportation, construction, troop construction, acquisition and disposal of real property, facilities engineering, topographic and geodetic engineering functions, food service, graves registration, laundry, dry cleaning, bath, property disposal, and other logistic services.</td>
</tr>
<tr>
<td>Combat Support (CS)</td>
<td>Units or organizations whose primary missions are to furnish operational assistance to combat forces.</td>
</tr>
<tr>
<td>Command, Control, and Communications Systems (C3)</td>
<td>The facilities, equipment, communications procedures, and personnel essential to a commander for planning, directing, and controlling operations of assigned forces to accomplish assigned missions.</td>
</tr>
<tr>
<td>Commander's Estimate of the Situation</td>
<td>A document reflecting the logical process of reasoning by which a commander considers all the circumstances affecting the military situation and decides on a course of action to be taken to accomplish the mission.</td>
</tr>
</tbody>
</table>
Component Command
(or Service/Functional Component Command)
The Service command, its commander, and all its individuals, units, detachments organizations, or installations that have been assigned to the unified command.

Concept of Operations
A verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operations. The concept of operations is often embodied in campaign plans and operation plans. The concept of operations is designed to give an overall picture of the operation.

CONPLAN
An operation plan in concept format that would require considerable expansion or alteration to convert it into an OPLAN or OPORD.

Contingency
An emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment. (JCS Pub. 5-0)

Contingency Plan
A plan for major contingencies that can reasonably be anticipated in the principal geographic subareas of a command.

Contingency Planning
Developing plans for potential crises or the military requirements that can reasonably be expected in an area of responsibility is contingency planning. It is conducted during peacetime competition, conflict, and war and may be performed deliberately or under crisis conditions. Contingency planning for joint operations is coordinated at the national level by designing planning tasks and relationships among the combatant commanders and providing them with projections of the forces and resources.
expected to be available to accomplish those tasks. Commanders throughout the unified chain of command may task their staffs and subordinate commands with additional contingency planning tasks beyond those specified at the national level to provide broader contingency coverage. (JCS Pub. 5-0)

**Course of Action (COA)**

The scheme adopted to accomplish a task or mission. As a product of the course of action development process of the Joint Operation Planning and Execution System, the supported commander's recommended course of action will be contained in his Commander's Estimate. It will include the concept of operations, evaluation of supportability estimates of supporting organizations, and an integrated time-phased database of combat, combat support, and combat service support forces and sustainment within the constraints of the time available for development. When approved, the course of action becomes the basis for the development of an operation plan or order. (JCS Pub. 5-0)

**Course of Action Development**

The Joint Operation Planning and Execution System process that provides for the development of military responses and which includes, within the limits of the time allowed: establishing force and sustainment requirements with actual units; evaluating force, logistic, and transportation feasibility; identifying and resolving resource shortfalls; recommending resource allocations; and producing a course of action via a Commander's Estimate that contains a concept of operations, employment concept, risk assessments, prioritized courses of action, and supporting databases. (JCS Pub. 5-0)

**Crisis**

An incident or situation involving a threat to the United States, its territories, citizens, military forces, or vital interests that develops
rapidly and creates a situation of such diplomatic, economic, political, or military importance that commitment of U.S. military forces and resources is contemplated to achieve national objectives. (JCS Pub. 5-0)

<table>
<thead>
<tr>
<th>Crisis Action Planning</th>
<th>The time-sensitive development of joint operation orders in response to imminent crisis. Crisis action planning follows prescribed Crisis Action Procedures to formulate and implement an effective response within the time frame permitted by the crisis. (JCS Pub. 5-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crisis Action Procedures (CAP)</td>
<td>A system specified in JCS Pub. 5-02.4 that gives guidance and procedures for joint operation planning by military forces during emergency or time-sensitive situations. The procedures are designed to give the Chairman of the Joint Chiefs of Staff information to develop timely recommendations to the National Command Authorities for decisions involving the use of U.S. military forces.</td>
</tr>
<tr>
<td>Critical Resupply</td>
<td>Items that are needed to sustain the initial combat capability or that compete for transportation assets while the force module including combat support and combat service support is still closing on the objective area.</td>
</tr>
<tr>
<td>D-Day</td>
<td>The unnamed day on which a particular operation, that is, a land assault, air strike, naval bombardment, parachute assault, or amphibious assault, begins or is to begin. H-hour is the specific hour on D-day at which a particular operation begins or is to begin.</td>
</tr>
<tr>
<td>Debarkation</td>
<td>The unloading of troops with their supplies and equipment from their ship or aircraft.</td>
</tr>
<tr>
<td>Decision</td>
<td>In an estimate of the situation, a clear and concise statement of the line of action the commander intends to follow as the one most favorable to the</td>
</tr>
</tbody>
</table>
successful accomplishment of the mission.

Deliberate Planning
The development of joint operation plans for contingencies identified in joint strategic planning documents. Conducted principally in peacetime, deliberate planning is accomplished in prescribed cycles that complement other DoD planning cycles and in accordance with formally established joint procedures. (JCS Pub. 5-0)

Deployability Posture
The state or stage of a units' preparedness for deployment to participate in a military operation, defined in five levels as follows:

**Normal Deployability Posture (ND)** - Unit is conducting normal activities. Commander is monitoring the situation in an area of tension and reviewing plans. No visible overt actions being taken to increase deployability posture.

**Increased Deployability Posture (ID)** - Unit is relieved from commitments not pertaining to the mission. Personnel recalled from training areas, pass, and leave to meet the deployment schedule. Preparation for deployment of equipment and supplies initiated. Predeployment personnel actions completed, essential equipment and supplies located in CONUS or at overseas installations identified.

**Advanced Deployability Posture (AD)** - All essential personnel, mobility equipment, and accompanying supplies checked, packed, rigged for deployment, and positioned with deploying unit. Unit remains at home station. Movement requirements confirmed. Airlift, sealift, and intra-CONUS transportation resources identified, and initial movement schedules completed by TCCs.

**Marshaled Deployability Posture (MD)** - First increment of deploying personnel,
mobility equipment, and accompanying supplies marshaled at designated POEs, but not loaded. Sufficient strategic aircraft or sealift assets positioned at, or enroute to, the POE either to load the first increment or to sustain a flow, as required by the plan or directive being considered for execution. Adequate supporting ALCEs, stage aircrews (if required), and support personnel positioned to sustain the airlift flow at onload, enroute, and offload locations.

**Loaded Deployability Posture (LD)** - All first increment equipment and accompanying supplies loaded aboard ships and prepared for departure to designated objective area. Personnel prepared for loading on minimum notice. Follow-on increments of cargo and personnel enroute or available to meet projected loading schedules. Sufficient airlift positioned and loaded at the POE to move the first increment or to initiate and sustain a flow, as required by the plan or directive being considered for execution. Adequate supporting ALCEs, stage aircrews (if required), and support personnel positioned to sustain the airlift flow at onload, enroute, and offload locations.

**Deployment**

The relocation of forces and materiel to desired areas of operations. For the purposes of this document, deployment encompasses all activities from origin or home station through destination, specifically including intra-CONUS, intertheater, and intratheater movement legs, staging areas, and holding areas. (JCS Pub. 5-0)

**Deployment Database**

The JOPES database containing the necessary information on forces, materiel, filler personnel, medical evacuees, noncombat evacuees, and replacement personnel movement requirements to support plan execution.
The database reflects information (1) contained in the refined TPFDD, or (2) developed during the various phases of the crisis action procedures, and (3) the movement schedules or tables developed by the USTRANSCOM components to support the deployment of required forces, personnel, and materiel. (The AFSC Pub. 1 definition was modified to read "JOPES database" vice "JDS database.")

**Deployment**

An order issued by competent authority to prepare forces for movement or to move forces, for instance, to increase deployability posture of units.

**Destination (DEST)**

The terminal geographic location in the routing scheme for forces only. (Resupply and replacement personnel are routed to a port of support.) The destination identifies the station or location in the objective area where the unit will be employed. For some units, the destination may be the same as their POD.

**Earliest Arrival Date (EAD)**

A day, relative to C-day, that is specified by a planner as the earliest date when a unit, a resupply shipment, or replacement personnel can be accepted at a port of debarkation during a deployment. Used with the latest arrival date (LAD), it defines a delivery window for transportation planning.

**Embarkation**

The loading of troops with their supplies and equipment into ships or aircraft.

**Employment**

The strategic or tactical use of forces in an area or theater of operations. (JCS Pub. 5-0)

**Employment Planning**

The part of operation planning concerned with the strategic or tactical use of forces and materiel within the area of operations.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enemy Capabilities</strong></td>
<td>Courses of action of which the enemy is physically capable, and that, if adopted, will affect accomplishment of our mission, such as attack, defense, withdrawal, etc.</td>
</tr>
<tr>
<td><strong>Estimate of the Situation</strong></td>
<td>The logical process of reasoning by which a commander considers all the circumstances affecting the military situation and arrives at a decision as to the course of action to be taken in order to accomplish his mission. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td><strong>Estimated Departure Date (EDD)</strong></td>
<td>In TFE simulation, an estimate of the earliest date after the available-to-load date (ALD) on which each movement requirement could leave the port of embarkation.</td>
</tr>
<tr>
<td><strong>Execute Order</strong></td>
<td>An order issued by competent authority to initiate operations.</td>
</tr>
<tr>
<td><strong>Execution Planning</strong></td>
<td>The Joint Operation Planning and Execution System process that provides for the translation of an approved course of action into an executable plan of action through the preparation of a complete operation plan or order. Execution planning is detailed planning for the commitment of specified forces and resources and is accomplished during both deliberate and crisis action planning. For deliberate planning, execution planning is performed as part of contingency planning in cases where fully developed operation plans are required. During crisis action planning, it is that planning through which an approved operation plan or other NCA-approved course of action is adjusted, refined, and translated into an operation order. Execution planning can proceed on the basis of prior deliberate planning, or it can take place in the absence of prior planning. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td><strong>Feasibility</strong></td>
<td>An operation plan review criterion to ensure that the assigned tasks could be accomplished using available resources.</td>
</tr>
</tbody>
</table>
Feasible Arrival Date (FAD)  
In TFE simulation, the earliest computer-forecast date, after the designated earliest arrival date (EAD), when each movement requirement would be unloaded at the port of debarkation (POD). When the FAD is later than the latest arrival date (LAD), a transportation shortfall exists.

Filler Personnel  
Individuals of suitable grade and skill initially required to bring a unit or organization to its authorized strength.

Force List  
A total list of forces required by an operation plan, including assigned forces, augmentation forces, and other forces to be employed in support of the plan.

Force Module (FM)  
A grouping of combat, combat support, and combat service support forces, and their appropriate non-unit-related personnel and supplies, for a specified period of time, usually 30 days. The elements of force modules are linked together or uniquely identified so that they may be extracted from or adjusted as an entity in the TPFDD to enhance flexibility and usefulness of the operation plan during a crisis.

Force Record  
A description of the TPFDD unit composed of three parts:

Force requirement routing data composed of force description information, such as force requirement number, unit type code, unit level code, personnel strength, ILOC, POD, DEST, load configuration, movement dates, preferred mode and source of transportation;

Force unit identification incorporating the unit identification code, unit name, ORIGIN, RLD, POE, ALD, preferred transportation mode; and

Force movement characteristics, including passengers and cargo of a
type unit defined by TUCHA file data
for the standard UTC.

Force Requirement Number (FRN)
The alphanumeric code used to uniquely
identify force entries in a TPFDD.

Force Requirements Generator (FRG)
The JOPES ADP application program that
is used by the planner to originate,
analyze, delete, or change a time-
phased force list. (The AFSC Pub. 1
definition was modified to read "JOPES
ADP" vice "JOPS ADP.")

Functional Component Command
A command normally, but not
necessarily, composed of forces of two
or more Services, which may be
established in peacetime or war to
perform particular operational missions
that may be of short duration or may
extend over a period of time. These
are component commands of a functional
command such as USTRANSCOM or USSOCOM.
Examples of functional component
commands are MAC, MSC, SOCOM, and
NAVSPEWAR, etc.

H-Hour
The specific hour on D-day at which a
particular operation commences.

Host Nation Support
Civil and/or military assistance
rendered by a nation to foreign forces
within its territory during peacetime,
times of crisis/emergency, or wartime,
under agreements mutually concluded
between the nations.

Implementation
The Joint Operation Planning and
Execution System process that provides
for the initiation, conduct, and
termination of operations, campaigns,
or war to attain defined objectives.
It consists of procedures to issue
orders; conduct mobilization,
deployment, employment, and sustainment
activities; and control, monitor,
replan, and direct operations. (JCS
Pub. 5-0)

Implementation Planning
Implementation planning is operational
planning associated with the conduct of
a continuing operation, campaign, or
### Joint Chiefs of Staff (JCS)

The Corporate body consisting of the Chairman, Joint Chiefs of Staff; the Chief of Staff, U.S. Army; the Chief of Naval Operations; the Chief of Staff, U.S. Air Force; and the Commandant of the Marine Corps. (JOPES Master Plan, September 1991)

### Joint Force

A general term applied to a force composed of significant elements of the Army, the Navy and/or the Marine Corps, and the Air Force, or two or more of these Services, operating under a single commander authorized to exercise...
unified command or operational control over joint forces.

Joint Operation Planning

Joint operation planning refers exclusively to planning activities associated with the preparation of operation plans and orders (other than the SIOP) for the conduct of military operations in hostile environments by the combatant commanders in response to requirements established by the Chairman, Joint Chiefs of Staff. As such, joint operation planning includes contingency planning, execution planning, and implementation planning. Joint operation planning is performed in accordance with a formally established planning and execution system. (JCS Pub. 5-0)

Joint Operation Planning and Execution System (JOPES)

JOPES is a continuously evolving system that is being developed through the integration and enhancement of earlier planning and execution systems, the Joint Operation Planning System (JOPS) and the Joint Deployment System (JDS). It provides the foundation for conventional command and control by national and theater-level commanders and their staff. It is designed to satisfy their information needs in the conduct of joint planning and operations. JOPES includes joint operation planning policies, procedures, and reporting structures supported by communications and ADP systems. JOPES is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities associated with joint operations. (JCS Pub. 5-0)

Joint Operation Planning Process

A coordinated joint staff procedure used by a commander to determine the best method of accomplishing assigned tasks and to direct the action necessary to accomplish the mission.

Joint Planning and Execution Community (JPEC)

The headquarters, commands, and agencies involved in training, preparation, movement, reception,
employment, support, and sustainment of military forces assigned or committed to a theater of operations. The JPEC usually consists of the Joint Staff; Services and certain of their major commands, for example, the Service wholesale logistic command; unified and specified combatant commands and their subordinate commands, that is, joint task forces, component commands, subordinate unified commands, etc.; and the defense agencies, such as DLA, DIA, etc., as may be appropriate to a given scenario. Previously known as the Joint Deployment Community (JDC).

(A) Joint Staff

The staff of a commander of a unified or specified combatant command, or of a joint task force that includes members from the several Services comprising the force.

(The) Joint Staff

The staff assigned or detailed to permanent duty under the Chairman of the Joint Chiefs of Staff as provided for under the National Security Act of 1947, as amended, to assist the Chairman, Vice Chairman, and JCS members in carrying out their responsibilities.

Joint Strategic Capabilities Plan (JSCP)

The Joint Strategic Capabilities Plan conveys strategic guidance, including apportionment of resources, to the CINCs and the Chiefs of the Services, to accomplish assigned strategic tasks based on military capabilities existing at the beginning of the planning period. The JSCP offers a coherent framework for capabilities-based military advice to the NCA. (The JSCP is a part of the Joint Strategic Planning System.)

Joint Strategic Planning System (JSPS)

The formal means by which the Chairman of the Joint Chiefs of Staff carries out his responsibility to furnish strategic plans and strategic direction for the Armed Forces. It complements the DoD Planning, Programming, and Budgeting System and interacts with
other specialized management and planning systems.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Task Force (JTF)</td>
<td>A force composed of assigned or attached elements of the Army, the Navy and/or the Marine Corps, and the Air Force, or two or more of these Services, that is constituted by the Secretary of Defense or by the commander of a unified or specified command, subordinate unified command, or existing joint task force.</td>
</tr>
<tr>
<td>JOPES ADP</td>
<td>The WWMCCS standard computer-based system consisting of standard data files, standard ADP programs, and instructions for the reporting and exchange of data used to develop, analyze, refine, review, and maintain joint operation plans. (AFSC Pub. 1 definition was modified to read &quot;JOPES ADP&quot; vice &quot;JOPS ADP.&quot; )</td>
</tr>
<tr>
<td>L-Hour</td>
<td>The specific hour on C-Day at which a deployment operation begins or is to begin. L-hour is 0001Z unless otherwise specified.</td>
</tr>
<tr>
<td>Latest Arrival Date (LAD)</td>
<td>A day, relative to C-day, that is specified by a planner as the latest date when a unit, a resupply shipment, or replacement personnel can arrive at the port of debarkation and support the concept of operations.</td>
</tr>
<tr>
<td>Level of Supply</td>
<td>The quantity of supplies or materiel authorized or directed to be held in anticipation of future demands.</td>
</tr>
<tr>
<td>Limiting Factor</td>
<td>A factor or condition that, either temporarily or permanently, impedes mission accomplishment, for example, transportation network deficiencies, lack of in-place facilities, malpositioned forces or materiel, extreme climatic conditions, distance, transit/overflight rights, political conditions, etc.</td>
</tr>
</tbody>
</table>
| Lines of Communications     | All the routes, land, water, and air, that connect an operating military
force with a base of operations and along which supplies and military forces move.

Logistics

The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, the aspects of military operations that deal with design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; movement, evacuation, and hospitalization of personnel; acquisition or construction, maintenance, operation, and disposition of facilities; and acquisition or furnishing of services.

Logistics Estimate

An appraisal resulting from an orderly examination of the logistic factors influencing contemplated courses of action to permit conclusions to be drawn concerning the degree and manner of that influence.

Marshalling Area

The geographic location where a deploying unit will assemble, hold, and organize supplies and/or equipment for onward movement.

Materiel

All items, excluding real property, installations, and utilities, needed to equip, operate, maintain, and support military activities without distinction as to their application for administrative or combat purposes.

Medical Planning Module (MPM)

The JOPES ADP application program used to determine the impact of an operation on the total medical system including the amount of medical support needed, such as bed, MEDEVAC, and blood/fluid requirements. (AFSC Pub. 1 definition was modified to read "JOPES ADP" vice "JOPS ADP").

Military Capability

The ability to achieve a specified wartime objective measured in terms of:
force structure - numbers, size, and composition of defense forces;

modernization - technical sophistication of forces' units, weapon systems, and equipment;

readiness - ability of forces, units, weapon systems to deliver the designed output; and

sustainability - the staying power of forces, units, and weapons.

Mission
The task, together with the purpose, that clearly indicates the action to be taken and the reason for taking it.

Mobilization
The process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. This includes activation of all or part of the Reserve components, as well as assembling and organizing personnel, supplies, and materiel.

Movement
The JOPES ADP application program that computes the time-phased non-unit-related requirements for resupply based on the size of the force to be supported and the duration of the planned operation. (The AFSC Pub. 1 definition was modified to read "JOPES ADP" vice "JOPS ADP.")

Movement Schedule
A schedule developed to monitor or track a separate identity, whether a force requirement, cargo/personnel increment, or lift asset. The schedule shows the assignment of specific lift resources to move the personnel and cargo included in a specific movement increment. Arrival and departure times at POE, etc., are detailed to show a
flow and workload at each location. Movement schedules are detailed enough to support plan execution.

**Movement Table**

A table prepared by USTRANSCOM components giving detailed instructions for each force requirement and each non-unit-related cargo or personnel increment of the TPFDD concerning the scheduled movement from ORIGIN or POE to intermediate location, POD, or DEST. The table is based on the estimated or planned availability of lift resources; it is not an execution document.

**National Command Authorities (NCA)**

The President and the Secretary of Defense or their duly deputized alternates or successors.

**National Military Command System (NMCS)**

The component of the Worldwide Military Command and Control System designed to support the National Command Authorities in the exercise of their responsibilities.

**Non-Air-Transportable Cargo**

Cargo that exceeds any of the following dimensions: 1,453" x 216" x 156", or has a height of between 114" and 156" and a width that exceeds 144".

**Noncombatant Evacuees**

DoD-sponsored personnel, Department of State personnel, other U.S. citizens and designated aliens who must be moved from a threatened geographic area or theater of operations.

**Nonunit Record**

A TPFDD file entry for non-unit-related cargo and personnel; characteristics include using and providing organization, type of movement, routing data, cargo category, weight, volume, area required, and number of personnel requiring transportation.

**Non-Unit-Related Cargo**

All equipment and supplies, other than those identified as the unit equipment or accompanying supplies of a specific unit, requiring transportation to an area of operations, for example, resupply, military support for allies, and support for nonmilitary programs.
such civil relief. A cargo increment number (CIN) is assigned to a non-unit-related cargo element for movement requirement identification.

**Non-Unit-Related Personnel**

All personnel requiring transportation to or from an area of operations, other than those assigned to a specific unit, for example, filler personnel, replacements, temporary duty/temporary additional duty personnel, civilians, medical evacuees, and retrograde personnel. A personnel increment number (PIN) is assigned to a non-unit-related personnel element for movement requirement identification.

**NOPLAN**

A contingency for which no operation plan has been published.

**Notional Unit**

See Type Unit.

**On-Line**

Having direct and immediate connection to the computer.

**Operation**

A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to gain the objective of any battle or campaign. (JCS Pub. 5-0)

**Operation Order (OPORD)**

A directive issued by a commander to subordinate commanders for effecting coordinated execution of an operation.

**Operation Plan**

A plan for a single or series of connected operations to be carried out simultaneously or in succession. It is usually based upon stated assumptions and is in the form a of directive by higher authority to permit subordinate commanders to prepare supporting plans and orders. The designation "plan" is usually used instead of "order" in preparing for operations well in advance. An operation plan may be put into effect at a prescribed time, or on signal, and then becomes the operation plan.
order. Within the context of the Joint Operation Planning and Execution System, an operation plan is any plan, except the SIOP, for the conduct of military operations in a hostile environment, prepared by a supported commander in response to a requirement established by the Chairman of the Joint Chiefs of Staff.

| Operation Plan In Complete Format (OPLAN) | An operation plan for the conduct of joint military operations that can be used as a basis for development of an OPORD. |
| Operation Plan In Concept Format (CONPLAN) | An operation plan in an abbreviated format that would require considerable expansion to convert it into an OPLAN or OPORD. |
| Operational Control (OPCON) | The authority delegated to a commander to perform those functions of command over subordinate forces involving the composition of subordinate forces, the assignment of tasks, the designation of objectives, and the authoritative direction necessary to accomplish the mission. OPCON includes directive authority for joint training. OPCON should be exercised through the commanders of assigned normal organizational units or through the commanders of subordinate forces established by the commander exercising OPCON. OPCON normally provides full authority to organize forces as the operational commander deems necessary to accomplish assigned missions, and to retain or delegate OPCON or tactical control as necessary. OPCON may be limited by function, time, or location. It does not, of itself, include such matters as administration, discipline, internal organization, and unit training. (JCS Pub. 5-02.4) |
| Organic Transportation | Transportation resources that are assigned to a unit and can give the lift capability for all or part of that unit's movement requirements. |
| **ORIGIN** | The beginning point of a deployment.
The point or station at which a movement requirement is located. |
<p>| <strong>Plan Summary</strong> | A required element of an operation plan that gives a brief description of the mission, general situation, the concept of operations, the major forces required, command arrangements, and the commander’s appraisal of logistic feasibility. |
| <strong>Planned Resupply</strong> | The shipping of supplies in a regular flow as envisaged by existing preplanned schedules and organizations, which will usually include some form of planned procurement. |
| <strong>Planning and Execution Database</strong> | The computer-supported database portion of a course of action or operation plan. It contains time-phased force data, non-unit related cargo and personnel data, and movement data for the plan. |
| <strong>Planning, Pro-DoD gramming, and Budgeting System (PPBS)</strong> | The cyclic process that produces the portion of the President’s budget submission to Congress. |
| <strong>Port of Debarkation (POD)</strong> | The geographic point (port or airport) in the routing scheme where a movement requirement will complete its strategic deployment. |
| <strong>Port of Embarkation (POE)</strong> | The geographic point (port or airport) in the routing scheme where a movement requirement will begin its strategic deployment. |
| <strong>Port of Support (POS)</strong> | The geographic point (port or airport) in an objective area that is the terminal point for strategic deployment for non-unit-related supplies and replacement personnel. Each component designates ports of support for four categories of resupply: general cargo, ammunition, POL, and air deliveries. |</p>
<table>
<thead>
<tr>
<th><strong>Projected Closure Date</strong></th>
<th>The date when a unit moving by organic transportation expects to arrive and complete unloading at its destination.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning Factor</strong></td>
<td>A properly selected multiplier used in planning to estimate the amount and type of effort involved in a contemplated operation. Planning factors often are expressed as rates, ratios, or lengths of time.</td>
</tr>
<tr>
<td><strong>Planning Order</strong></td>
<td>An order issued by the Chairman of the Joint Chiefs of Staff to initiate execution planning. The order normally will follow a Commander’s Estimate and will precede the Alert Order. NCA approval of a selected course of action is not required before a Planning Order can be issued.</td>
</tr>
<tr>
<td><strong>Ready-To-Load Date (RLD)</strong></td>
<td>The date when a unit will be ready to move from ORIGIN.</td>
</tr>
<tr>
<td><strong>Readiness Planning</strong></td>
<td>Readiness planning is operational planning required for peacetime operations. Its objective is the maintenance of high states of readiness and the deterrence of potential enemies. It includes planning activities that influence day-to-day operations and the peacetime posture of forces. As such, its focus is on general capabilities and readiness rather than the specifics of a particular crisis, either actual or potential. The assignment of geographical responsibilities to combatant commanders, the establishment of readiness standards and levels, the development of peacetime deployment patterns, the coordination of reconnaissance and surveillance assets and capabilities, and the planning of joint exercises are examples of readiness planning. No formal joint planning system exists for readiness planning such as exists for contingency and execution planning.</td>
</tr>
<tr>
<td><strong>Record</strong></td>
<td>A collection of data elements pertaining to one logical subject.</td>
</tr>
</tbody>
</table>

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JOPES, for example, all the data elements used to describe a force requirement and its routing are stored in the "force record." For resupply and replacement personnel, all the data elements are stored in non-unit-related cargo records and non-unit-related personnel records.

Redeployment
The transfer of a unit, an individual, or supplies deployed in one area to another area, to another location within the area, or to the zone of interior for the purpose of further deployment.

Replacements
Personnel required to take the place of others who leave the unit.

Required Delivery Date (RDD)
A date, relative to C-day, when a unit must arrive at its destination and complete offloading to properly support the concept of operations.

Reserve Component
Reserve components of the Armed Forces of the United States are the Army National Guard of the United States; the Army Reserve; the Naval Reserve; the Marine Corps Reserve; the Air National Guard of the United States; the Air Force Reserve; and the Coast Guard Reserve.

Resources
The forces, materiel, lift, or other assets and capabilities apportioned or allocated to the commander of a unified or specified command.

Response Time
The estimated or actual time necessary for a unit, when alerted, to achieve the directed deployability posture.

Resupply
See Planned Resupply.

Retrograde
The movement of personnel and/or cargo out of the area of operations back to their points of origin.

Service Force Modules
A hypothetical force module built per Service doctrine composed of C, CS, and
CSS forces and sustainment for an estimated period, e.g., 30 days.

**Shortfall**
The lack of forces, equipment, personnel, materiel, or capability identified as a plan requirement that would adversely affect a command's ability to accomplish its mission.

**Sourcing (Force)**
The identification of the actual units, their origins, POEs, and movement characteristics to satisfy the hypothetical force requirements in the TPFDD.

**Sourcing (Logistics)**
The identification of the origin and determination of the availability of the non-unit-related logistics requirements in the TPFDD.

**Specified Command**
A command that has a broad continuing mission and that is established and so designated by the President through the Secretary of Defense with the advice and assistance of the Chairman of the Joint Chiefs of Staff. It normally is composed of forces from one Service.

**Staff Estimates**
Assessments of courses of action by the various staff elements of a command that serve as the foundation of the Commander's Estimate. (JCS Pub. 5-0)

**Strategic Lift**
Common user lift (provided by MAC, MSC, and MTMC). (JCS Pub. 5-02.4)

**Strategic Sealift Force**
Common-user sealift assets of the MSC force, including fast sealift ships and pre-positioned ships on completion of their mission and release, that furnish the capability to deploy and sustain military forces. The normal peacetime force may be augmented by shipping from the Ready Reserve Fleet and National Defense Reserve Fleet and from U.S. and allied merchant fleets.

**Strategy Determination**
The Joint Operation Planning and Execution System process for analyzing changing events in the international environment and the development of
national strategy to respond to those events. In joint operation planning the responsibility for recommending military strategy to the NCA lies with the Chairman of the Joint Chiefs of Staff in consultation with the other members of the Joint Chiefs of Staff and in concert with supported commanders. (JCS Pub. 5-0)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subordinate Commander</td>
<td>A commander under the operational command of either a supported or supporting commander, normally a Service component commander or the commander of a subordinate unified command or subordinate joint task force. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td>Supported Commander</td>
<td>The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the commander who prepares operation plans or orders in response to requirements of the Chairman, Joint Chiefs of Staff. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td>Supporting Commander</td>
<td>A commander who furnishes augmentation forces or other support to a supported commander or who develops a supporting plan.</td>
</tr>
<tr>
<td>Supporting Plan</td>
<td>An operation plan prepared by a supporting commander or a subordinate commander to satisfy the requests or requirements of the supported commander’s plan.</td>
</tr>
<tr>
<td>Sustainment</td>
<td>The provision of personnel, logistic, or other support required to maintain and prolong operations or combat until successful accomplishment of the mission or national objective. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td>Task</td>
<td>A job or function assigned to a subordinate unit or command by higher authority.</td>
</tr>
<tr>
<td><strong>Theater</strong></td>
<td>The geographical area outside the continental United States for which a commander or a unified or specified command has been assigned military responsibility. (JOPES Master Plan, September 1991)</td>
</tr>
<tr>
<td><strong>Threat Identification and Assessment</strong></td>
<td>The Joint Operation Planning and Execution System process that provides timely warning of potential threats to U.S. interests; intelligence collection requirements; the effects of environmental, physical, health hazard, and cultural factors on friendly and enemy operations; and determines the enemy military posture. (JCS Pub. 5-0)</td>
</tr>
<tr>
<td><strong>Time-Phased Force and Deployment Data (TPFDD)</strong></td>
<td>Time-phased force and deployment data for an OPLAN, includes:</td>
</tr>
<tr>
<td></td>
<td>Units to be employed.</td>
</tr>
<tr>
<td></td>
<td>Units to be deployed to support the OPLAN, with a priority indicating desired sequence for their arrival at ports on a given day.</td>
</tr>
<tr>
<td></td>
<td>Routing of forces to be deployed.</td>
</tr>
<tr>
<td></td>
<td>Mobility data associated with deploying forces.</td>
</tr>
<tr>
<td></td>
<td>Non-unit-related personnel and cargo movements to be conducted concurrently with deployment of forces. (JOPES Concept of Operations)</td>
</tr>
<tr>
<td><strong>TPFDD Maintenance</strong></td>
<td>The process that allows a supported commander to incorporate changes to Time-Phased Force and Deployment Data that have occurred since TPFDD refinement.</td>
</tr>
<tr>
<td><strong>TPFDD Refinement</strong></td>
<td>A process that identifies specific forces, incorporates accurate movement requirements for the first 90 days of a TPFDD, and ensures that the deployment transportation requirements for the TPFDD are within the capabilities defined in JCS guidance.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Transportation Feasibility Estimator (TFE)</td>
<td>The JOPES ADP application program that simulates the strategic deployment of movement requirements in the TPFDD on the common-user lift assets apportioned for the operation. (The AFSC Pub.1 definition was modified to read &quot;JOPES ADP&quot; vice &quot;JOPS ADP.&quot;)</td>
</tr>
<tr>
<td>Type Unit</td>
<td>A hypothetical organizational entity established by the Armed Forces and described by the approximate physical and movement characteristics of all real-world units of a similar type that it represents. It is identified by a unique five-character alphanumeric unit type code (UTC) and is included in the Type Unit Characteristics File (TUCHA).</td>
</tr>
<tr>
<td>Type Unit Characteristics File (TUCHA)</td>
<td>A file that gives standard planning data and movement characteristics for personnel, cargo, and accompanying supplies associated with deployable type units of fixed composition. The file contains the weight and volume of selected cargo categories, physical characteristics of the cargo, and the number of personnel requiring nonorganic transportation. Also called a Type Unit Data File.</td>
</tr>
<tr>
<td>Unified Command</td>
<td>A command with a broad and continuing mission under a single commander and composed of significant assigned components of two or more Services, and which is established and so designated by the President, through the Secretary of Defense with the advice and assistance of the Chairman of the Joint Chiefs of Staff, or, when so authorized by the Chairman of the Joint Chiefs of Staff, by a commander of an existing unified command established by the President.</td>
</tr>
<tr>
<td>Unit-Related Equipment and Supplies</td>
<td>All equipment and supplies that are assigned to a specific unit or that are designated as accompanying supplies.</td>
</tr>
<tr>
<td>Warning Order</td>
<td>A crisis action planning directive issued by the Chairman, Joint Chiefs of Staff, with the approval of the NCA,</td>
</tr>
</tbody>
</table>
that initiates the development and evaluation of courses of action by a supported commander and requests that a Commander's Estimate be submitted. (JCS Pub. 5-0)
APPENDIX C

JOINT OPERATION PLANNING AND EXECUTION SYSTEM COMPUTER-ASSISTED INSTRUCTION (JOPESCAI)

USER’S MANUAL
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I. INTRODUCTION

Background

The Joint Operation Planning and Execution System Computer-Assisted Instruction (JOPESCAI) was developed to provide the Joint Planning and Execution Community (JPEC) with general functional training and procedural information about JOPES use in a microcomputer environment. The United States Transportation Command (USTRANSCOM) contracted Potomac Systems Engineering in September 1987 to develop a system which would simulate JOPES behavior, operate with a "live" data base of representative planning and deployment data, provide tutorials to teach the user why functions are accomplished as they are, and inform the user how to accomplish planning and deployment functions for nearly 400 JOPES screens. (Computer Based Assistance For Training (COMBAT), 1991)

This user's manual is a guide to JOPESCAI Version 4.31 which is based on JOPES version 3.1. It will lead the novice through the system in a particular sequence designed to maximize comprehension and learning. The scenario-driven instructions will also enhance the user's enjoyment of the system.

Objective

The manual will familiarize users with JOPES' conventions and terminology, navigation and permissions. It stresses the functions which build OPLANS, build force modules and requirements, schedule and manifest carriers, and retrieve deployment information in the form of reports, displays or graphs. Users also will begin to understand the complexities of joint planning and the contributions made by systems such as JOPES.

JOPESCAI emulates the functional capabilities of JOPES Subsystems A-G; however, not all functions or options are available to the user. This will become apparent as the features of the subsystems are introduced. A list of JOPES Subsystems and Functions is provided in section XVI of this User's Manual.

Note

Unless otherwise noted, material for this user's manual is drawn from Joint Operation Planning and Execution System (JOPES) Version 3.1 Training Manual, Volumes 1 and 2, 17 May 1991. The reference for JOPES data field elements, abbreviations and terms, and input codes is the Joint Deployment System Users Data Element Dictionary, 17 May 1991.
II. GETTING STARTED

A. Equipment

Hardware:
- IBM-PC compatible microcomputer
- 20 megabyte hard disk drive
- One 5.25-in or 3.5-in. floppy disk drive
- A color monitor

Software:
- MS-DOS Version 3.0 or higher
- JOPESCAI version 4.31 program diskettes

B. Installing the Program

Insert disk 1 into drive A (or B).

Type A (or B): CAIINSTL <xmit>. <Xmit> is the "enter" or "return" key. Upper or lower case characters may be used.

The first menu will ask you to select a fixed disk. Press C or D, depending on where you want to store the program on the hard disk drive.

A query appears: THE DEFAULT DIRECTORY IS: JOPESCAI. DO YOU WISH TO CHANGE NAMES? (Y/N): Enter N.

The computer then begins to write the files to your hard disk. It will prompt you for the remaining disks.

C. Starting up JOPESCAI

Start up your computer with DOS.

If necessary, change drives to the one which JOPESCAI was installed on, the C drive (or D). At the DOS prompt type:

C: and press <xmit>.

Change directories to \JOPESCAI. At the DOS prompt type:

CD\JOPESCAI and press <xmit>.

Now you are ready to start the JOPESCAI system. At the DOS prompt type:

JOPESCAI and press <xmit>.
A series of menu screens appear. Navigate through these, selecting the following options:

ETC EMULATION (or "X" for the default mode)

TRAINING SESSIONS

JOPES

The last menu screen is entitled SESSION DATABASE MENU. To ensure you will start the session with the original database, select:

ORIGINAL DATA BASES - RESTORE

In subsequent sessions, you may choose to reinitialize the database or continue with the data you have previously entered. In the latter case, select:

CONTINUE WITH USER'S CURRENT DATA.

The screen now displays PLEASE LOG IN. Press the F5 key and the display is of a string of characters representing the log-in sequence. Input the password JDSCAI <xmit>.

The computer responds with an *. Type JOPES <xmit>.

The JOPES Master Menu (Figure 2.1) appears on the screen and you are ready to begin the training program.

If you make an ERROR while logging in, the system will allow you to try the log-in again. However, after two failures due to error it will display a "SYSTEM ACCESS DENIED" message. You will not be completely booted off the system. A menu will appear and you may try again.

[Diagram of JOPES Master Menu]

Figure 2.1 JOPES Master Menu
D. Log-off Procedures

Saving data. During the course of the training or exercise session you will make many data changes. These will be automatically saved for the next session, even if the program is aborted abnormally.

Log-off quick method. Type Z in Subsystem Code or Function Code or *Z on the command line and <xmit>.

   Computer response: *JOPES TERMINATED*

   Type BYE <xmit>.

   Computer response: LINE TERMINATED - CP

   Turn off, if done.

Log-off and Return to DOS.

To return to DOS, press <xmit> after receiving the LINE TERMINATED - CP message and the screen below appears (Figure 2.2).

```
SESSION DATABASE MENU
CONTINUE WITH USER'S CURRENT DATA
ORIGINAL DATA BASES - RESTORE
USER'S PREVIOUSLY SAVED DATA - RESTORE
SAVE USER'S CURRENT DATA
RETURN
```

Figure 2.2 Session Database Menu

Place the cursor over "RETURN" and <xmit>.

Another menu will appear with an EXIT option. Place the cursor over it and <xmit>. You will now be back at the DOS prompt.

E. Data Entry Rules. Data entry on the forms occurs in the brackets which are called DATA FIELDS and have field names or abbreviations. You cannot change any information appearing without brackets. A blinking cursor identifies the location for data entry.

   * Filling a data field causes the cursor to advance to the next data field.
RETURN (XMIT); Transmits entries.
* ARROWS; Cursor moves in arrow direction.
* TAB; Tabs right to the next data field.
* CTRL + TAB; Tabs left to previous data field.
* DEL; Effaces characters.
* BACKSPACE; Deletes a previous character(s) or moves the cursor backward.
* HOME; Moves cursor to first data field on the page.
* CTRL HOME; Clears screen. Caution: This includes pre-filled fields.
* CTRL END; Clears entries to end of line.
* CTRL DEL; Deletes line at cursor.
* INS; Insert a space at the cursor.

WARNING: An inappropriate entry followed by <xmit> may result in termination of the program. To avoid this, when options are provided, enter data as directed.

F. Command Input and Response Messages. The last two lines of the JOPES form are for command instructions, system responses such as error messages, and command code input. The command code permits you to quickly page through multiple page displays, change to a new function or use the JDS Information Trace (JSIT). JSIT are abbreviated command codes.

When you press the <xmit> key, JOPES processes the entries according to the option selected. If there is an error or a required response is not filled in, the system will prompt you for it, usually with a message and blinking cursor where an addition or change is needed.

G. Navigation Procedures. The heading in the upper right corner of most screens allows changes from one subsystem and/or function to another.

There are six basic ways to navigate between and within subsystem functions and screens.
* **SUBSYSTEM AND FUNCTION (S/F) CODES.** This option permits you to select the JOPES Master Menu, a subsystem menu or a function in any subsystem. Most screens display these codes.

**Subsystem Code.** Entering this field permits you to move directly to another subsystem.

Entering this code causes the menu of the selected subsystem to appear. Remember that access is limited to subsystems A through G.

X in the Subsystem Code field calls the JOPES Master Menu.

Z results in exiting JOPESCAI.

An INVALID symbol elicits the JOPES Master Menu.

**Function Code.** Entering this field permits a choice of screens to review or modify data as well as to specify retrieval criteria. The following entries are valid in the Function Code field:

X calls the subsystem menu.

Z causes the user to exit JOPESCAI.

Entering a valid character calls the screen for the selected function of the subsystem.

Entering an INVALID symbol calls the subsystem menu.

Sometimes OPTIONS are specified for this field:

OPTION A (denotes add) builds a new record, if all required fields contain appropriate data.

OPTION C (change) modifies an existing record according to new entries.

OPTION D (delete) removes the entire existing record from the data base.

OPTION R (review) displays the first page of the current record.

* **OPTION SELECTION.** Many JOPES screens list options from which you may select one or more for further processing.

* **PAGING COMMANDS.** Frequently, displays are on multiple pages and may even contain multiple parts as well. The display screen
will list the selections available. Among these are First Page (FP), Last Page (LP), Next Page (NP), Previous Page (PP), Return to Paging (RP), and Page NNN (NNN is the specific page number). When multiple parts exist, a slash (/) follows the page identification. For example, FP/LP results in the first page, last part of the display.

NOTE: These options may be used only when so stated on the screen.

* JSIT COMMANDS. JSIT commands are abbreviated formats which allow navigation between subsystems/functions providing a display or review capability. They are entered on the command line which is the bottom line of the display screen, above the function codes.

A few commonly used JSIT commands:

*SF. On the display screen, you may enter an asterisk (*) along with the S/F code on the command line to navigate to another. For example, you may wish to transit to FUNCTION 1 of the REQUIREMENTS SUBSYSTEM. Simply enter *B1 on the command line at the bottom of the screen and <xmit>.

Use the * found above the 8 on your keyboard. The * on the numeric keypad calls up the printer screen menu.

LIST. Displays a list of OPLANs available.

*Z and <xmit> will exit JOPESCAI.

Some other JSIT commands will be identified as different screens and opportunities are presented.

A more extensive list of JSIT commands is also available online. With the JOPES MASTER MENU on the screen, you will note the four 'F' codes across the bottom. Select F2 for the JOPES MASTER MENU HELP SCREEN. Across the bottom of this screen there are several options. Use the right arrow key to move the cursor, select GEN HELP. Figure 2.3 will appear listing more options, among them, JSIT COMMANDS.

NOTE: JSIT commands may be used only when so stated on the screen.
Select General Subject To Review

DATE RELATIONSHIPS
ENTERING DATA ON JDS FORMS
FORMATS FOR DATE FIELDS
GRAPHICS IN JDS
JDS PAGING COMMANDS
JDS SUBSYSTEM AND FUNCTION CODES
JSIT COMMANDS
OPLAN SERIES, ULN/FM, CIN & PIN NUMBERS
PHASES OF THE CRISIS ACTION SYSTEM
TCC CARRIER NAMING CONVENTIONS

Figure 2.3 Select General Subject to Review

* CONTINUE or NEXT Field. Some screens with more than one page have a CONTINUE or NEXT field. Call the next screen by entering C or N in the designated field and <xmit>.

* TRANSMIT. Although the instructions SPACE XMIT TO CONTINUE frequently appear, it is unnecessary to press the space bar, <xmit> suffices.

HELP. Extensive on-line HELP is available on every screen via the functions listed across the bottom of the screen.

F1 = TUTOR An on-line tutorial which cites the purpose of the display, provides an explanation and when applicable, provides further specifics.

Press Alt F1 to activate AUTOTUTOR. Press the same keys again and it will be turned off. When activated, the word AUTO will appear above F1 = TUTOR at the bottom of the screen. This feature automatically displays TUTOR screens before each Menu and the first screen of a JOPES function.

F2 = HELP Provides entry information, edit rules and where to solicit additional help.

F3 = Glossary An extensive list of abbreviations and acronyms used in JOPES. Using the arrow keys, move cursor over the desired acronym and the term or phrase will be highlighted at the top of the screen. Press <xmit> to obtain a definition for the term.
The codes listed in the table in Figure 2.4 are available on-line.

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<td>Force Indicator Codes (FIC)</td>
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<td>GeoLocation Codes (GEO)</td>
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</tr>
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<td>Unit Level Codes (ULC)</td>
<td>UNIT</td>
</tr>
</tbody>
</table>

Figure 2.4 Table of Codes

I. TIME LIMIT. You will notice that there is a digital clock display at the bottom of the screen. The program allows ten minutes to make an entry and <xmit>. The clock counts down and when it reaches 20 seconds, bells will sound and a warning message appears. The computer may lock up if the response is not timely. If you need to leave the terminal for a few minutes, press any of the FUNCTION KEYS (F1, F2, F3 or F4) to ensure the maximum time allowed away from the program. The clock does not run while these functions are displayed.

J. MULTI-SCREEN VIDEO MEMORY. The system has a video memory of 6 screens arranged in a circular fashion. To review previous screens, simply press the PgUp key.

The previous screen will be displayed and "Page -1" will appear on the status line (last line on the screen). If you continue to press the PgUp key, you will eventually return to Page 0, the current page. You can view the screens in the opposite direction by using the PgDn key.

Next, the Master Menu is described in detail.
The MASTER MENU is the primary display in JOPES. Beginning with the upper left corner, the DATE-TIME-GROUP (DTG) is the real time and date when you called the screen up. For example, in Figure 2.5, 041956ZFEB.

Below that is the JOPES SCREEN NUMBER. Each screen has a unique number. These numbers are sometimes referenced in the HELP and TUTOR screens. In Figure 2.5, the screen number is CF-001-B.

Moving to the upper right portion of the screen, you'll find SUBSYSTEM CODE. Valid entries are found in the body of the menu. CAI entries are limited to Subsystems A through G.

**X** = MENU. Calls the menu for the selected Subsystem.

**Z** = EXIT JOPES. Exit the system.

FUNCTION CODE. In this manual you will be provided with the code to enter. A complete list of function codes available in CAI is presented in section XVI and is available through the HELP (F2) key.

OPLAN. A five digit alphanumeric code. In CAI, OPLAN 911PC is the only one available for use.

DATABASE. Two options, E and R; use E throughout CAI.
Below the body of the screen there are system messages, the command line, function keys, and the status line.

**SYSTEM MESSAGE.** NOTE: JSIT MAY BE ENTERED FROM THIS SCREEN. JSIT commands may be entered in the bracketed field below this note.

**COMMAND LINE.** A bracketed field where entries may be made.

F1, F2, F3, and F4. The function keys for TUTOR, HLEP, GLOSSARY, and CODES were explained in detail in the HELP portion of this section.

**STATUS LINE:** Found at the very bottom of the screen, below the function keys.

8. This is an indication of communication with the host.

ERR 9. If an ETC (Enhanced Terminal Capability) error occurs, an error message is displayed. Press Alt E to view an explanation of the code.

L01 C79. Indicates the line and column position of the cursor.

CAP. Indicates that the CAP toggle is set to upper case.

NUM. Indicates that the NUM toggle is set to numeric entry.

PAGE. Current page number is always "0". Using PgUp and PgDn keys, you can view previous screens.

09:43. Digital clock indicating how much time remains to <xmit> an entry.

04FEB92 20:02:59. The current date and time in a military format.
III. PERMISSIONS AND OPLAN ACCESS

The remainder of this manual will guide you through the system in scenario format in order to familiarize you with the JOPES subsystems and functions available in JOPESCAI.

Current Situation. You are an action officer at the United States Mediterranean Command (USMDEDCOM). Your responsibilities include ensuring OPLANs are available for analysis and execution. Other responsibilities include building and coordinating limited access courses of action (COA) online in JOPES. You recently received a masters degree from the Naval Postgraduate School in Transportation Management and have prior experience at a Military Sealift Command.

A crisis in Tunisia leads JCS to initiate CAP Phase II. USTRANSCOM establishes a deployment teleconference (TLCF), which you join. You are first tasked to review the current OPLAN.

First, review the display of USERID permissions to determine what you are authorized to access. These permissions are found in Subsystem G. On the JOPES Master Menu enter G in Subsystem Code, E in database and <xmit>. Figure 3.1 is then displayed.

![Figure 3.1 USERID Permissions]

Review the screen to see what specific JOPES permissions are allowed. The permission accesses are:

* QRY (Query). Users may view system information on terminal screens using predefined and user specified retrievals. Users may not make changes to the database nor print reports.
* **UPD (Update).** Users may add, change or delete data base information. This permission is limited to users who have the authority to change OPLAN data. Permits the user to build or tailor OPLANs using the Force Module Subsystem.

* **IRM (Information Resource Manager).** Users may load and update OPLAN data, review user permissions, recover the data base and monitor system performance. The USTRANSCOM FDBM (Functional Data Base Manager) is the responsible authority for performing many of the IRM functions for network plans.

* **RPT (Reports).** Users may create reports using high-speed system printers. (Not applicable in the stand-alone PC environment without access to the mainframe.)

* **DAT (Deployment Action Team).** Reserved for the USTRANSCOM DAT.

* **ASM (Automated Scheduling Message).** Required to use the ASM Subsystem; limited to USTRANSCOM CAT and FDBM personnel.

* **TOA (TCC - Transportation Component Command).** Access is limited to USTRANSCOM personnel for establishing and changing carrier identification and itinerary information.

* **GRT (Grant).** The FDBM may grant or rescind any of the previously mentioned permissions for a specific USERID.

* **GPH (Graphics).** Users may transfer JOPES data files to a graphics terminal.

Remember that an on-line review of these permission definitions is detailed in the TUTOR portion of the program (Press F1 while viewing this screen).

Now we can check the OPLAN status before performing any functions. This provides an opportunity to use a JSIT command. On the JOPES Master Menu type E in DATABASE and type LIST on the command line at the bottom of the screen. <Xmit>. Figure 3.2 contains the current list for the exercise database.
Components of the JDS OPLAN MENU

OPLAN. Only OPLANs that you have access to will be displayed. Each OPLAN has a unique number.

TYPE. Three types of plans exist:

* N (Normal); the FDBM (Functional Data Base Manager) restricts access by OPLAN series.
* L (Limited); the OPLAN creator restricts access by OPLAN ID, USERID and/or terminal ID.
* C (Close Hold); again, restricted by the OPLAN creator.

DESCRIPTION. A succinct title to identify the OPLAN.

SECURITY CLASSIFICATION. Self-explanatory.

CDAY. The day on which a deployment operation commences or is to commence. Normally displayed if C-Day has been declared.

STATUS. Refers to the types of OPLAN status.

Avail - OPLAN online for use
Load - OPLAN being loaded; not yet available
Delete - OPLAN being deleted; not available
Build - OPLAN being updated

To review OPLAN 911PC, the only current plan available, enter A in Subsystem, 911PC in OPLAN and <xmit>. The display in Figure 3.3 illustrates the options available in Subsystem A.
Four options are presented on the Plan Information Subsystem Menu:

* Option 1 - UPDATE PLAN INFORMATION

Enter 1 in Function Code and press <xmit>. A menu will appear. Place an X in all the options you wish to review or change. The purpose of these screens is to enter brief narrative plan information, for example, OPLAN identification, mission objectives, concept of operations, assumptions, constraints, mobilization status and major forces required. Changes cannot be performed in JOPESCAI.

* Option 2 - DISPLAY PLAN INFORMATION

Enter 2 in Function Code and press <xmit>. Review the OPLAN information display and note that it has five parts. After viewing this screen, you should have concluded that the plan can meet national objectives.

* Option 3 - DISPLAY PLAN STATUS

Enter 3 in Function Code and press <xmit>. The Plan Status Display for OPLAN Number 911PC consists of two screens allowing you to review several bits of information. Figures 3.41 and 3.42 illustrate Option 3.

* Option 4 - PLAN DESCRIPTION REPORT

Enter 5 in Function Code and press <xmit>.

This option choice is displayed in Figure 3.5.
New information displayed in Figure 3.41 includes L-Hour which is the specific time on C-Day that the operation is to commence or has commenced. Plan distribution may be local or network, meaning that it is available at other JOPES sites.

The first introduction to TPFDD data is presented here. Force requirements are composed of three types: Unit Line Numbers (ULNs), Cargo Increment Numbers (CINs) and Personnel Increment Numbers (PINs). The next section of the manual is devoted to Force Requirements.

Scheduling Information, the subtitle of Figure 3.42, displays the earliest scheduled departure day and the latest scheduled arrival day along with the number of TCC and organic carriers scheduled.

The MAC PULL extracts the first six days of air requirements based on EAD (Earliest Arrival Date) from an OPLAN, then
processes them through the MAC automated scheduling system. MSC extracts the first 30 days of sea requirements by EAD.

DTG WHEN LAST PUSH PROCESSED indicates when TCCs provided schedule data to the JOPES data base.

The MAC PUSH returns the first four days of carriers and schedules and MSC returns the first 30 days.

To exit this function, enter a JSIT or *SF command on the command line. To complete reviewing the A subsystem screens, enter *A5 and <xmit>. Figure 3.5 is displayed.

---

**Figure 3.5 Plan Description Report**

From the PLAN DESCRIPTION REPORT (Figure 3.5) you can select plans that you would like produced. Type an X in the space next to OPLAN 911PC and <xmit>. The Spawn Batch Job Screen is displayed.

---

**Figure 3.6 Spawn Batch Job**

In this screen (Figure 3.6) you enter report disposition instructions. This function initiates spawned jobs into the batch environment. For our purposes, enter C for security classification and E to exit which returns you to the previous screen.
We have now viewed all of the functions available in Subsystem A and obtained introductory knowledge of the OPLAN germane to our crisis situation. In the next section, extensive data displays will be introduced.
IV. REQUIREMENTS SUBSYSTEM

General Situation. Along the Tunisian border, tension mounts, and the Supported Commander tasks the Services to begin reviewing available military forces.

The Requirements Subsystem, Subsystem B, contains all the data required to review available forces and nonunit requirements. The options available in this subsystem can be seen by entering B in Subsystem Code and <xmit> and are displayed in Figure 4.1.

![Figure 4.1 Requirements Subsystem Menu](image)

As you can see, the Requirements Subsystem Menu consists of numerous functions. Briefly, the purposes they perform are:

<table>
<thead>
<tr>
<th>Function Code</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Update OPLAN ULN movement data (e.g. PAX, cargo) from a revised TUCHA file.</td>
</tr>
<tr>
<td>2</td>
<td>Duplicate up to 25 ULNs.</td>
</tr>
<tr>
<td>3</td>
<td>Merge requirements from several sources into a target OPLAN.</td>
</tr>
<tr>
<td>4</td>
<td>Add, delete or change nonunit records (e.g. CINs/PINs).</td>
</tr>
<tr>
<td>5</td>
<td>Rename ranges of ULNs, CINs or PINs by OPLAN, FM or a specified range.</td>
</tr>
<tr>
<td>7</td>
<td>Review, add, change, or delete cargo details for a single ULN.</td>
</tr>
</tbody>
</table>
8 Create a partial or complete TPFDD tape or disk file from the JOPES data base.

9 Add, change, or delete information for multiple requirements of the same type.

E Review requirements and scheduling data.

F Print selected OPLAN requirements with sourcing and scheduling data.

G Print source and aggregated nonunit cargo details and unmanifested lift requirements.

H Print reports summarizing movement data.

I Print a list of incomplete or illogical OPLAN requirement data.

J Print a report highlighting errors that could prevent TCC scheduling.

K Add, change, or delete aggregated nonunit cargo details.

L Add or delete a single requirement or change information.

Q Automatically recalculate movement dates relative to a specific base date.

Since we are interested in seeing the data before we manipulate it, select S/F BE or enter *BE on the command line and <xmit>. The screen, DISPLAY ULN/CIN/PIN/UIC DATA, is displayed.

<table>
<thead>
<tr>
<th>021441ZFEB</th>
<th>DISPLAY ULN/CIN/PIN/UIC DATA</th>
<th>SUBSYSTEM CODE (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ-E01</td>
<td>X=MENU, Z=EXIT JDS OR FUNCTION CODE [E]</td>
<td></td>
</tr>
</tbody>
</table>

SELECT ONE ENTER 'X' OR DESIRED ULN/CIN/PIN/UIC

| [X]  | DISPLAY ULN DATA ON FMID [ ] (BLANK DEFAULTS TO 'ALL') |
| [ ]  | ENTER ULN FOR DETAIL DISPLAY |
| [ ]  | ENTER ULN FOR SCHEDULE STATUS DISPLAY |
| [ ]  | DISPLAY CIN DATA ON FMID [ ] (BLANK DEFAULTS TO 'ALL') |
| [ ]  | ENTER CIN FOR DETAIL DISPLAY |
| [ ]  | ENTER CIN FOR SCHEDULE STATUS DISPLAY |
| [ ]  | ENTER AGGREGATED CIN FOR DISPLAY BY SUPPLY STATUS |
| [ ]  | DISPLAY PIN DATA ON FMID [ ] (BLANK DEFAULTS TO 'ALL') |
| [ ]  | ENTER PIN FOR DETAIL DISPLAY |
| [ ]  | ENTER PIN FOR SCHEDULE STATUS DISPLAY |
| [ ]  | ENTER UIC FOR UNIT MOVEMENT DATA |

Figure 4.2 Display ULN/CIN/PIN DATA

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In Figure 4.2, several options are present. However, since you are not familiar with the ULNs or FMIDs (Force Module Identification Numbers) in OPLAN 911PC, enter X at DISPLAY ULN DATA and <xmit>. Leave the FMID blank and all the ULNs will be listed. Figure 4.3 provides an example of ULN data.

![ULN Data Table]

It is important to review this screen's (Figure 4.3) contents. You will be referring to some of these data later in the manual. The elements of this display and a brief description are as follows:

**Data Field**

**Description**

**ULN**

Uniquely identifies each force record. A specific unit may have multiple ULNs in an OPLAN to differentiate routings, movement modes or deployment timing.

**Force Description or Unit Name/UIC**

Describes force requirement or names the unit designated to fill the requirement. UIC or Unit Identification Code is an alphanumeric code which uniquely identifies each unit of the Armed Forces.

**UTC**

Unit Type Code. Categorizes the type unit by common distinguishing characteristics.

**ULC**

Unit Level Code. Unit hierarchical level.

**FIC**

Force Indicator Code. Distinguishes standard from nonstandard units.

**SVC**

Service. A-Army; F-Air Force; N-Navy; M-Marine Corps; 1-USCINCENT.

---

**Figure 4.3 ULN DATA - OPLAN 911PC**

It is important to review this screen's (Figure 4.3) contents. You will be referring to some of these data later in the manual. The elements of this display and a brief description are as follows:

**Data Field**

**Description**

**ULN**

Uniquely identifies each force record. A specific unit may have multiple ULNs in an OPLAN to differentiate routings, movement modes or deployment timing.

**Force Description or Unit Name/UIC**

Describes force requirement or names the unit designated to fill the requirement. UIC or Unit Identification Code is an alphanumeric code which uniquely identifies each unit of the Armed Forces.

**UTC**

Unit Type Code. Categorizes the type unit by common distinguishing characteristics.

**ULC**

Unit Level Code. Unit hierarchical level.

**FIC**

Force Indicator Code. Distinguishes standard from nonstandard units.

**SVC**

Service. A-Army; F-Air Force; N-Navy; M-Marine Corps; 1-USCINCENT.
PRVG Providing Organization. F-HQ US Air Force; 7-CINCFOR; 4-USCINCEUR; B-Navy Component Commander

PAX Number of passengers identified for movement.

TOTAL STONS Total short tons identified for movement.

POD Port of Debarkation.

MDE Mode of transportation. A-Air; S-Sea

SRC Source of transportation. H-via unit's organic aircraft; K-via MAC; E-via MSC ship; N-via host nation's aircraft; C-via USN or USCG ship, but not MSC.

LAD Latest Arrival Date. Stated relative to C-Day.

SCH F-fully scheduled; P-partially scheduled; blank-not scheduled; O-overmanifested.

PULL P-TCC has pulled the requirement for scheduling. Blank-requirement may be scheduled, not pulled.

This display is actually three pages. Enter NP on the command line to view the next page. Any time you seek ULN information, enter U on the command line where permitted. To review a specific ULN, type U YYYYYY (substitute the actual ULN for the Y's).

To gain further information about a specific ULN, select one and enter it on the command line, e.g., U 9AAC <xmit>.

Figure 4.4 ULN Detail Display
The ULN Detail Display, Figure 4.4, illustrates a "busy" screen, loaded with the following information:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPLAN</td>
<td>OPLAN identification</td>
</tr>
<tr>
<td>ULN</td>
<td>Unit line number. In this instance, 9AAC.</td>
</tr>
<tr>
<td>PIC</td>
<td>Parent Indicator Code defines hierarchical relationships. If blank, not a parent.</td>
</tr>
<tr>
<td>FIC</td>
<td>Force Indicator Code. Describes a standard or nonstandard unit. Refer to F4 CODES for a complete list of FIC codes used in JOEPSCAI.</td>
</tr>
<tr>
<td>UTC</td>
<td>Unit Type Code. Refer to F4 CODES to decipher the codes.</td>
</tr>
<tr>
<td>RESVD</td>
<td>Reserved. Reserved for each command to list additional requirements.</td>
</tr>
<tr>
<td>RLD</td>
<td>Ready to Load Date.</td>
</tr>
<tr>
<td>ALD</td>
<td>Available to Load Date.</td>
</tr>
<tr>
<td>LOC</td>
<td>Location defined. Origin, port of embarkation, intermediate, port of debarkation, destination.</td>
</tr>
<tr>
<td>SCH</td>
<td>F-fully scheduled; P-partially scheduled; blank-not scheduled; 0-overmanifested.</td>
</tr>
<tr>
<td>PULL</td>
<td>P-TCC has pulled the requirement for scheduling. Blank-requirement may be scheduled, not pulled.</td>
</tr>
<tr>
<td>GEOLOCATION CODE</td>
<td>Displays GEO code of the location. HCTL-Ft Bragg; TMKH-Pope AFB</td>
</tr>
<tr>
<td>GEOLOCATION NAME</td>
<td>Displays long name of the location.</td>
</tr>
<tr>
<td>COUNTRY CD</td>
<td>Country/State Code of the location.</td>
</tr>
<tr>
<td>COUNTRY NAME</td>
<td>Displays abbreviated name of the country.</td>
</tr>
<tr>
<td>INS TYPE</td>
<td>Installation Type. AIN-Army Installation; MAP-Military Airport; APT-Airport; RPA-Rural Populated Area</td>
</tr>
<tr>
<td>PREFERRED MODE</td>
<td>Preferred mode of transportation.</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>PREFERRED</td>
<td>Preferred source of transportation. SVC-Service; ORGA-Organic.</td>
</tr>
<tr>
<td>SOURCE</td>
<td>Load Configuration. A-Administrative-maybe containerized; N-Not applicable.</td>
</tr>
<tr>
<td>LC</td>
<td>Discharge Constraint. N-No special considerations.</td>
</tr>
<tr>
<td>DC</td>
<td>Earliest Arrival Date.</td>
</tr>
<tr>
<td>RDD</td>
<td>Required Delivery Date at Destination.</td>
</tr>
<tr>
<td>DYS DLY</td>
<td>Days delayed at intermediate geographic location.</td>
</tr>
<tr>
<td>TYPE</td>
<td>Type Delay. T-total force; F-incremental portions.</td>
</tr>
<tr>
<td>LOC</td>
<td>Location of intermediate stop: A-after POD; B-between POE and POD; C-before POE.</td>
</tr>
<tr>
<td>CEI</td>
<td>Critical Employment Indicator. Categorizes unit critically for employment.</td>
</tr>
<tr>
<td>NBRCGOCATS</td>
<td>Number of cargo categories for the ULN.</td>
</tr>
<tr>
<td>PROJ CODE</td>
<td>Special projects and applications.</td>
</tr>
<tr>
<td>CARGO</td>
<td>Defines bulk, oversize, outsize, NAT (not air transportable), and total cargo in terms of STONS, MTONS (measurement tons) or CBBLS (hundreds of barrels).</td>
</tr>
<tr>
<td>IN FORCE</td>
<td>Lists Force Modules which contain this ULN.</td>
</tr>
<tr>
<td>MODULES</td>
<td></td>
</tr>
<tr>
<td>AUTH PERS</td>
<td>Personnel authorized for movement.</td>
</tr>
<tr>
<td>PAX</td>
<td>Number of passengers requiring transportation.</td>
</tr>
<tr>
<td>NON BASE LINE</td>
<td>Reserved for command use.</td>
</tr>
</tbody>
</table>

ULC, SVC and PROVORG were previously discussed with respect to Figure 4.3.

To view the detail display of other ULNs, enter the ULN number on the command line or page through the current display. The ULNs are in alphanumeric order.

Return to Figure 4.2 by entering *BE on the command line and <xmit>. To review the unit movement data for ULN 9AAC, at ENTER
UIC FOR UNIT MOVEMENT DATA, enter WABSAA and <xmit>. Now, you should have Figure 4.5 on the screen.

Figure 4.5 Unit Movement Data For UIC

Codes on the Unit Movement Data For UIC screen, Figure 4.5, that require more explanation are cargo category and heavy lift. Refer to the online CODE menu (F4) for details. The cargo category codes essentially define its form, size and potential for containerization. Heavy lift codes are simply weight and dimension specification categories.

Status. Your superior requests information on deployment status and carriers designated to move ULN 9AAC.

Return to the BE menu by entering *BE on the command line and <xmit>, or enter US 9AAC and <xmit> to proceed directly to the ULN Schedule Summary. If you selected *BE, enter 9AAC at ENTER ULN FOR SCHEDULE STATUS DISPLAY, <xmit>.

Figure 4.6 ULN Schedule Summary

The ULN Schedule Summary (Figure 4.6) reflects unit movement once the deployment begins. 210 passengers have arrived at the POD
FTZH as well as 24 STONS and 2 MTONS. You will notice that this is a two part report. For the second half, ULN Schedule Detail, enter **USD <xmit>** on the command line as directed by the instructions at the bottom of the screen. The next figure (4.7) is displayed.

![Figure 4.7 ULN Schedule Detail](image)

The ULN Schedule Detail display of Figure 4.7 shows the carrier(s) on which the ULN is manifested. It also cites the POE and POD long names, scheduled/actual departure/arrival times, passenger/cargo data and whether any diversions or changes to the carrier have occurred.

Printed reports are generated via the H Function of Subsystem B. Although you cannot actually print in this system due to hardware limitations, view the BH screen for the various options available. Enter ***BH** on the command line and **<xmit>** to display Figure 4.8.

![Figure 4.8 F11 Reports](image)
In Figure 4.8 you can see that FLI Reports are available by tons and square footage. Individual requirement types may be selected or all. There is also a sort option. Finally, you can limit the OPLAN output through use of the Data Selection Criteria display (Figure 4.9) by entering X at MORE SELECTION CRITERIA, <xmit>.

In Figure 4.9 the criterion selected is PROVORG, in this instance U. S. Navy (N). After entering the code(s), press <xmit> and the Spawn Batch Job screen (Figure 3.6) appears.

You have viewed several screens with respect to ULN data. Similar screens are also available with respect to CIN and PIN data. Return to the BE screen to select more data for viewing. CIN and PIN JSIT commands parallel those of ULN, e.g., enter C or P on the command line to receive the related listing of codes.

Other functions from Subsystem B will be reviewed in a later section.
V. FORCE MODULE SUBSYSTEM

General Situation. Reports from reconnaissance aircraft indicate a substantial deployment of Libyan military assets massed along the Tunisian border. A large scale invasion appears imminent. JCS has published a Warning Order, initiating CAP Phase III, Course of Action (COA) Development. Specific forces are identified in the Warning Order.

The Force Module (FM) Subsystem provides the capability to rapidly build and modify requirements in support of COA development during crisis situations. Further, it is helpful when building a plan from scratch by using available rollup information on each COA under consideration.

Force Modules group the combat, combat support, combat service support forces and their associated nonunit-related personnel and required supplies for a specified period of time, generally 30 days. This significantly increases the speed, flexibility and usefulness of joint operation planning during a crisis. FM elements are linked together or uniquely identified, permitting extraction or adjustment as an entity in the TPFDD.

Supported and Supporting CINCs have created FM libraries for their areas of operation. These FMs resemble those groupings of forces identified to fulfill their needs based on the region of operation and the potential scenarios or threats faced.

Prior to building a COA, review the FMs available in the OPLAN you plan to use. If FMs already exist that contain the tasked forces in the Warning Order, you can proceed and will have saved valuable time.

Returning to JOPESCAI, enter D in SUBSYSTEM CODE or *D on the command line and <xmit>. The Force Module Subsystem Menu is displayed in Figure 5.1.

```
022041ZFEB FORCE MODULE SUBSYSTEM MENU SUBSYSTEM CODE [D]
CT-005 X=MENU,Z=EXIT JDS OR FUNCTION CODE [ ]
OPLAN [911PCI]

FUNCTION CODE   DESCRIPTION
1   FORCE MODULE PROCESSING
2   FORCE MODULE PAGING DISPLAY
3   FORCE MODULE REPORTS
4   PLAN BUILD
5   PLAN DELETE (RESTRICTED TO CREATOR)
6   FORCE MODULE ROLLUP
7   USER SPECIFIED FM PROCESSING
8   FM DEPLOYMENT STATUS
FM MOVEMENT SUMMARY REPORT (ENTER ES IN SS/FC)

NOTE - YOU MAY WORK WITH OTHER OPLANS BY ENTERING A NEW OPLAN NUMBER ABOVE. CAREFULLY TRACK YOUR CURRENT OPLAN. A MISTAKE COULD GIVE UNEXPECTED RESULTS. CONSULT USERS MANUAL.
(NOTE - JSIT MAY BE ENTERED FROM THIS SCREEN)
```

Figure 5.1 Force Module Subsystem Menu

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The FM Subsystem functions and purpose are:

<table>
<thead>
<tr>
<th>Function Code</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Update narrative information for FMs, create FMs, add or delete specific ULNs/CINs/PINs to or from FMs, delete FMs from an OPLAN.</td>
</tr>
<tr>
<td>2</td>
<td>Review title, description, force requirements, nonunit passenger and cargo, and POD schedule information for FMs in an OPLAN.</td>
</tr>
<tr>
<td>3</td>
<td>Print FM reports.</td>
</tr>
<tr>
<td>4</td>
<td>Create a new or modify an existing OPLAN by selecting or excluding FMs from existing OPLANS.</td>
</tr>
<tr>
<td>5</td>
<td>Delete local OPLAN from the data base.</td>
</tr>
<tr>
<td>6</td>
<td>Review FM rollup data or FM rollup data with summary cargo totals for single and/or ranges of FMs.</td>
</tr>
<tr>
<td>7</td>
<td>Not used. Use S/F F6.</td>
</tr>
<tr>
<td>8</td>
<td>Print reports showing movement data for selected FMs or ranges of FMs.</td>
</tr>
</tbody>
</table>

Enter 2 in FUNCTION CODE on the FM Subsystem Menu and <xmit>. The Force Module Paging - Module List appears on the screen as in Figure 5.2.

![Figure 5.2 Force Module Paging - Module List](image)

All the FMs contained in OPLAN 911PC are displayed in Figure 5.2 by FMID and first title line.

Review a specific FM in greater detail by entering the JSIT command **FM XXXXX** (substitute valid FMID for Xs) on the command
line and <xmit>. Let's review FM 9AU by entering FM 9AU on the command line, <xmit>. Figure 5.3 is displayed.

![Figure 5.3 Force Module Paging - Directory](image)

Using the above directory in Figure 5.3, you can review pieces of the specific FM selected. Since we already have title information from Figure 5.2, move on to page 3 to review the descriptions. Enter PAGE 3 on the command line, <xmit>.

![Figure 5.4 Force Module Paging - Description List](image)

Page 3 (Figure 5.4) does not provide us with any new information with regards to FMID 9AU. Enter PAGE 4 on the command line, <xmit> (or just <xmit>). Force Module 9AU ULN Data (Figure 5.5) is displayed on the screen.

![Figure 5.5 Force Module ULN Data](image)
From Figure 5.3 you know that there are 29 ULNs. The remainder are on pages 5 and 6. The display column headings are the same as those found in section IV's ULN screens (see Figure 4.3).

Thus far we have only displayed ULN data. View pages 7 and 8 to review PIN and CIN data (Figures 5.6 and 5.7).

<table>
<thead>
<tr>
<th>OPLAN 912PC</th>
<th>FORCE MODULE 9AU PIN DATA</th>
<th>PAGE 7 OF 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN</td>
<td>DESCRIPTION</td>
<td>PAX</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>AM90000</td>
<td>MED EVACUEES</td>
<td>139</td>
</tr>
<tr>
<td>JE90000</td>
<td>NON COMBATANTS</td>
<td>500</td>
</tr>
<tr>
<td>MP90000</td>
<td>REPLACEMENTS</td>
<td>750</td>
</tr>
<tr>
<td>IM90000</td>
<td>MEDEVAC'S COME</td>
<td>645</td>
</tr>
</tbody>
</table>

ENTER FF, LF, NF, PP, PAGE 9999, SPACE XMIT, JSIT COMMAND, OR **SF**.

* NF

Figure 5.6 Force Module PIN Data

<table>
<thead>
<tr>
<th>OPLAN 912PC</th>
<th>FORCE MODULE 9AU CIN DATA</th>
<th>PAGE 8 OF 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN</td>
<td>DESCRIPTION</td>
<td>CAT</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>AA90000</td>
<td>AMMO SUP-ACCOMF</td>
<td>MDD</td>
</tr>
<tr>
<td>FA90000</td>
<td>AMMO RESUPPLY</td>
<td>MDD</td>
</tr>
<tr>
<td>MF90000</td>
<td>AMMO RESUPPLY</td>
<td>MDD</td>
</tr>
<tr>
<td>NP90000</td>
<td>REF PFT AIR JOB</td>
<td>20</td>
</tr>
</tbody>
</table>

ENTER FF, LF, NF, PP, PAGE 9999, SPACE XMIT, JSIT COMMAND, OR **SF**.

* D3

Figure 5.7 Force Module CIN Data

A printed report would be convenient at this time to review one of the Force Modules. The S/F is D3. Enter *D3 on the command line and <xmit>. The Reports screen is displayed.

<table>
<thead>
<tr>
<th>OPLAN 912PC</th>
<th>REPORTS</th>
<th>SUBSYSTEM CODE [D]</th>
</tr>
</thead>
</table>

* X-MENU, Z-EXIT JDS OR FUNCTION CODE [3]

Figure 5.8 Reports
Three different reports are available from S/F D3 as seen in Figure 5.8:

* A - Plan Requirements Module Reference Report
* B - Force Module Rollup Report
* C - Force Module Report

Since you are interested in detailed information, select C, the FORCE MODULE REPORT, type an X at LIMIT DATA RETRIEVAL and enter INDIVIDUAL FM, 9AU, as in Figure 5.8. <Xmit>. The FM Data Selection Criteria screen is displayed.

In Figure 5.9, by specifying only desired elements, a potentially voluminous report is reduced to a compact, precise document. A new field is introduced on this screen, NOT EQUAL. It allows you to include all requirements except the codes entered in the limitation fields.

<Xmit> and the Spawn Batch Job Screen appears (Figure 3.6).

Another Force Module function is FM Rollup. Enter D6 in the SUBSYSTEM and FUNCTION CODE or *D6 on the command line and <Xmit>. The Force Module Rollup screen is displayed.
As in Figure 5.10, some entries are required to obtain force module rollup information.

Enter A at SELECT ROLLUP TYPE to receive a rollup of FMs in a simple scan format.

Enter three individual FMs for rollup: 9AU, 9SE, AND 9AA.

<Xmit>. The Rollup of Force Modules (Scan) is displayed for your review.

The display table in Figure 5.11 is of FM rollup with level 1 detail for all requirements in each FM. Level 1 detail is the aggregate of numbers of passengers and tonnages.

The same data plus a breakdown of cargo is available by FMID. Two means are available:

* Enter *D6 on the command line, returning you to the Force Module Rollup screen (Figure 5.10). This time enter option B - ROLLUP OF FORCE MODULES WITH SUMMARY CARGO, <xmit>.
Enter **FMID XXX** (provide valid FMID for XXX) on the command line, <xmit>.

The Rollup of Force Modules with Summary Cargo for FMID 9AU is the screen before you and as seen in Figure 5.12.

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>37</th>
<th>7890</th>
<th>6155</th>
<th>2705.3</th>
<th>41272</th>
<th>57376</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORCE</td>
<td>29</td>
<td>7890</td>
<td>4121</td>
<td>2589.1</td>
<td>40092</td>
<td>57366</td>
<td>0</td>
</tr>
<tr>
<td>BULK</td>
<td>715.7</td>
<td>12822</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVER</td>
<td>1873.4</td>
<td>27270</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUT</td>
<td>0.0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAT</td>
<td>0.0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NONUNIT</td>
<td>8</td>
<td>2034</td>
<td>116.2</td>
<td>1180</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>BULK</td>
<td>10.0</td>
<td>1080</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVER</td>
<td>0.0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUT</td>
<td>0.0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAT</td>
<td>0.0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5.12 Rollup of Force Modules with Summary Cargo**

The Summary Cargo display (Figure 5.12) indicates level 2 detail of forces and nonunit requirements. Level 2 detail is a summary of the number of passengers and tonnages expressed as bulk, oversized, outsized and not-air-transportable (NAT).

Thus far you have encountered three functions in Subsystem D: 2, 3 and 6.

The S/F D1 and S/F D8 will be covered near the end of the manual in section XI.

The S/F D5, Plan Delete, is restricted to the creator and is not available in JOPESCAI.

The S/F D7 module is now covered in S/F F6 (see section XIII).

The S/F D4, Plan Build, is an important topic and the next section is devoted to it.
VI. BUILD OPLAN

**General Situation.** The MEDCOM staff has been directed to prepare a contingency plan to deploy selected armor units prior to execution of OPLAN 911PC.

CAP Phase III (COA Development) remains in effect.

**PLAN BUILD.**

Purpose: Review the functional procedures required to build an OPLAN using Force Modules during a crisis situation. A new plan may be created or an existing one modified.

This portion of the training, Subsystem/Function D4, is a predetermined path-driven scenario. As you progress through the screens, read the associated TUTOR and HELP screens which will provide useful information and the specific data to be entered. Although this process may seem tedious, it maximizes training benefits.

Begin by entering *D4 on the command line or S/F D4 and <xmit>.

The system will beep and a TRAINING ADVISORY will appear superimposed on the menu. Press any key to begin. Figure 6.1 appears with H1 at SUBSYSTEM/FUNCTION.

```
PLAN BUILD
SUBSYSTEM CODE [H1]
OPLAN [ ]

<table>
<thead>
<tr>
<th>ENTER OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - INITIALIZE A NEW OPLAN - THIS OPTION MOVED TO IRM S/F H1</td>
</tr>
<tr>
<td>B - ALLOCATE PLAN CONTROL TO COMMANDS</td>
</tr>
<tr>
<td>C - BUILD OR MODIFY PLAN USING FORCE MODULES</td>
</tr>
<tr>
<td>D - READY PLAN FOR DISTRIBUTION</td>
</tr>
<tr>
<td>(E - MODIFY PLAN ACCESS PERMISSIONS - OPTION MOVED TO IRM S/F H2)</td>
</tr>
</tbody>
</table>

JDS5CA: GO TO S/F 'H1' TO INITIALIZE PLAN

Figure 6.1 Plan Build
```

This menu directs you to INITIALIZE OPLAN using S/F H1. As H1 is already posted, as in Figure 6.1, press <xmit> to proceed.

The INIT NORMAL/LIMITED ACCESS/CLOSE HOLD OPLAN screen is displayed.

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The OPLAN must be initialized and placed in "Available" status before proceeding. The menu in Figure 6.2 permits the OPLAN builder to limit distribution and access, classify the plan and determine whether or not to load movement data.

In order to initialize your OPLAN, enter the following data:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Enter</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER OPLAN</td>
<td>9000X</td>
<td>USTRANSCOM series</td>
</tr>
<tr>
<td>ENTER OPLAN TYPE</td>
<td>L</td>
<td>Selects limited access</td>
</tr>
<tr>
<td>ENTER OPLAN DISTRIBUTION</td>
<td>L</td>
<td>Selects local site as the only host where OPLAN will exist</td>
</tr>
<tr>
<td>ENTER OPLAN CLASSIFICATION</td>
<td>U</td>
<td>Select Unclassified.</td>
</tr>
<tr>
<td>ENTER UNIT MOVEMENT DATA OPTION</td>
<td>Ø</td>
<td>Selects DO NOT LOAD UNIT MOVEMENT DATA</td>
</tr>
<tr>
<td>ENTER ACCESS OPTION</td>
<td>A</td>
<td>Limits access by USERID</td>
</tr>
</tbody>
</table>

Press <xmit>. The VERIFY INIT OPLAN screen is displayed.
Re-enter 9000X, as in Figure 6.3, to verify OPLAN ID, <xmit>. If an error is made you will return to the previous screen (Figure 6.2) and must repeat the process.

The Specify Userid Access to OPLAN screen is displayed.

The display in Figure 6.4 allows you to limit or change access to an OPLAN by USERID. You can change this at any time by simply recalling this screen. In this example, the JOPESFDBM has access as well as user JD59321. Enter the above USERIDs and <xmit>.

You will return to the Figure 6.2 display. A message across the bottom reads "OPLAN INITIALIZED; TRANSMIT TO CHECK PLAN STATUS". <Xmit> as directed.
The Plan Status Display screen (Figure 6.5) is a "display only" which screen shows only zero's at this point. Totals will update as you make changes to the data base. The plan status is AVAILABLE. Notice that the command line is filled: "*D4 TRANSMIT TO CONTINUE". Press <xmit>.

You are again at the PLAN BUILD screen (Figure 6.1). Enter option C this time, BUILD OR MODIFY PLAN USING FORCE MODULES. <Xmit>. The Build or Modify Plan screen is displayed.

The Build or Modify Plan screen in Figure 6.6 identifies three options for building the OPLAN. They are as follows:

Option A: Allows you to copy selected FM's from an existing OPLAN and assign to a target OPLAN.
Option B: Here you can exclude transfer of specific FM's from the source plan to the target plan.

Option C: Delete specific FM's and their associated requirements from an OPLAN. A powerful tool that is limited to users with IRM permissions.

Enter OPTION: A.

Enter * in REASSIGN OPTION to REASSIGN UNALLOCATED ULNS/CINS/PINS.

<Xmit>. The Force Module Selection - Reassignment screen is displayed.

```
Figure 6.7 Force Module Selection - Reassignment
```

In Figure 6.7, you may take an existing FM, copy it one or more times and provide a new identification number for the copy. Try this function by making the following entries:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOURCE OPLAN</td>
<td>911PC</td>
</tr>
<tr>
<td>MODULES</td>
<td>9ZA</td>
</tr>
<tr>
<td>COPIES</td>
<td>1</td>
</tr>
<tr>
<td>NEW-ID</td>
<td>9ZZ</td>
</tr>
</tbody>
</table>

This action will reassign FM 9ZA from OPLAN 911PC to OPLAN 9000X.

<Xmit>.

The same screen (Figure 6.7), now blank, reappears with a message displayed on line 22:

"INPUT ACCEPTED; ENTER MORE SELECTION DATA OR TRANSMIT".
The Spawn Batch Job screen (Figure 3.6) will display. Assign an appropriate classification. Do not EXIT this time but select another option. You will be assigned a SNUMB. Press <Xmit> again.

For the third time, the PLAN BUILD screen (Figure 6.1) is displayed, this time with A3 posted at S/F. The message at the bottom on line 22 reads, "JDSCAI - PLAN BUILD STARTED; NOW CHECK STATUS S/F A3".

<Xmit> and the Plan Status Display appears with *A3 on the command line. Press <Xmit> again to monitor the load status and view an update of the figures. The new information is exhibited as in Figure 6.8.

---

**Figure 6.8 Plan Status Display (Part 1)**

Among the new information in Part 1 of the Plan Status Display:

- **NUMBER OF FORCE RECORDS:** 59
- **NUMBER OF NONUNIT RECORDS:** 8
- **NUMBER OF FORCE MODULES:** 1
- **LOAD STATUS:** 100 % COMPLETE

The training session again leaves a message on the command line:

"*A1 JDSCAI - NOW UPDATE PLAN DESCRIPTION - XMIT TO CONT"

Press <Xmit>. The screen Update Plan Information is displayed.
You may limit your selection on this menu, shown in Figure 6.9, to those forms you wish to update, or leave blank to receive all of them. Since this is a training session, you will want to view each one individually.

**<Xmit>** to begin the review and update where desired. First, the Update Plan Identification, Mission and Objectives screen is displayed with R posted at FUNCTION CODE.

In Figure 6.10 you may enter text as appropriate. Enter C at FUNCTION CODE and then enter any blocks desired. However, JOPESCAI will not retain the information.

Press **<Xmit>** to continue with the rest of the UPDATE PLAN INFORMATION screens.

There will be a succession of screens, each attained by pressing the **<Xmit>** key. In a real situation, you would complete each of these. For our purposes, we will simply call each up to gain an
The idea of the data being incorporated into the new plan. The titles of the screens are as follows:

* UPDATE CONCEPT OF OPS, SUPPORTING CINCS & PLANS
* UPDATE KEY ASSUMPTIONS AND NARRATIVE ON OBJECTIVES
* UPDATE CONSTRAINTS, RESOURCES AND UNIT SHORTFALLS
* UPDATE NONUNIT RESUPPLY AND RELATED PERS SHORTFALL
* UPDATE MAJOR FORCES

The last <xmit> will return you to UPDATE PLAN INFORMATION with H2 in the S/F position. Press <xmit> to obtain the Change OPLAN Type/Access/Distribution menu with 9000X at ENTER OPLAN.

![Figure 6.11 Change OPLAN Type/Access/Distribution](image)

Following the Figure 6.11 display, select Option D, REVIEW/UPDATE USERID ACCESS TO OPLAN, and <xmit>. The User Permissions screen is displayed for your selection.

![Figure 6.12 User Permissions](image)
Select Option A, REVIEW USER ACCESS, as per Figure 6.12 and <xmit>.

SPECIFY USERID ACCESS TO OPLAN, screen number IF-104 (Figure 6.4) appears with the two USERID's entered in Figure 6.4 displayed. <xmit>.

The USER PERMISSIONS screen returns (Figure 6.12). Enter Option C this time, <xmit>.

Again, the SPECIFY USERID ACCESS TO OPLAN menu (Figure 6.4) is displayed. This is an opportunity to reconsider accesses and make modifications if desired. <xmit>.

The CHANGE OPLAN TYPE/ACCESS/DISTRIBUTION screen comes up (Figure 6.11). Press <xmit> and the JOPES MASTER MENU fills the screen. Press <xmit> as directed. A training advisory is displayed.

![Training Advisory](image)

Figure 6.13 Training Advisory

After reading the message in the Training Advisory (Figure 6.13), press <xmit> to continue. CONGRATULATIONS!! You've reached the end of the BUILD PLAN scenario with the JDS OPLAN Menu displayed.

![JDS OPLAN Menu](image)

Figure 6.14 JDS OPLAN Menu

Our new OPLAN 9000X is clearly displayed in Figure 6.14. <xmit> and you return to the JOPES Master Menu.
VII. FORCE RECORDS

General Situation. The USMEDCOM Component Commanders and their staffs, IAW CAP Phase III (COA Development), review the force list, mission, threat, logistics, terrain and other related factors for possible military COAs.

You have been tasked to add the following unit to OPLAN 911PC, dates and location based on guidance and staff coordination.

<table>
<thead>
<tr>
<th>Type Unit</th>
<th>EAD</th>
<th>LAD</th>
<th>RDD</th>
<th>POD</th>
<th>Dest</th>
</tr>
</thead>
<tbody>
<tr>
<td>105MM Tank Company</td>
<td>C005</td>
<td>C010</td>
<td>C015</td>
<td>El Borma Unknown</td>
<td></td>
</tr>
</tbody>
</table>

After a review of FM 9AU and current task organization, use ULN 9AAJ for the tank company. The UTC for a 105MM Tank Company is 2EBCD. We want to add this tank company's force records to FMID 9AU.

S/F BL Add the tank company as a single force record.

Enter BL and <xmit>. The FORCE REQUIREMENT DATA screen is displayed.

Figure 7.1 Force Requirement Data (Part 1 of 2)

First, looking at the screen (Figure 7.1), notice the options at the top of the display: ADD, CHANGE, DELETE, REVIEW.

Enter A, as you wish to add a ULN.

Since you are not familiar with Part 2 of this display, enter X at ENTER 'X' FOR PART 2, to view it after this screen is processed.
Notice that the RLD field is filled with CNNN. This is simply a reminder that dates are expressed as C (for C-DAY) and a three digit numerical entry.

We will complete the minimum required data fields to add this company. These fields are described below:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULN</td>
<td>9AAJ</td>
<td>ULN cannot already be in the OPLAN.</td>
</tr>
<tr>
<td>UTC</td>
<td>2EBCD</td>
<td></td>
</tr>
<tr>
<td>PROVORG</td>
<td>7</td>
<td>CINCFOR</td>
</tr>
<tr>
<td>PIC</td>
<td></td>
<td>Leave blank for subordinate unit.</td>
</tr>
<tr>
<td>POD MODE</td>
<td>A</td>
<td>Air movement to POD.</td>
</tr>
<tr>
<td>POD SOURCE</td>
<td>K</td>
<td>Movement by MAC.</td>
</tr>
<tr>
<td>POD LOAD CONF</td>
<td>A</td>
<td>Administrative configuration for efficiency.</td>
</tr>
<tr>
<td>POD DISCH CONST</td>
<td>N</td>
<td>No special considerations.</td>
</tr>
<tr>
<td>POD GEO</td>
<td>FTZH</td>
<td>El Borma</td>
</tr>
<tr>
<td>POD EAD</td>
<td>C005</td>
<td>C-Day + 5</td>
</tr>
<tr>
<td>POD LAD</td>
<td>C010</td>
<td>C-Day + 10</td>
</tr>
<tr>
<td>POD PRIORITY</td>
<td>001</td>
<td>Prioritized discharge</td>
</tr>
<tr>
<td>PRIORITY ADD-ON</td>
<td>A</td>
<td>Differentiates between same POD priority.</td>
</tr>
<tr>
<td>DEST MODE</td>
<td>L</td>
<td>Land movement to destination.</td>
</tr>
<tr>
<td>DEST SOURCE</td>
<td>H</td>
<td>Organic transportation.</td>
</tr>
<tr>
<td>DEST LOAD CONF</td>
<td>T</td>
<td>Tactical configuration required.</td>
</tr>
<tr>
<td>DEST DISCH CONST</td>
<td>N</td>
<td>No special considerations.</td>
</tr>
<tr>
<td>DEST GEO</td>
<td>UNQU</td>
<td>Unknown location in Tunisia.</td>
</tr>
<tr>
<td>DEST RDD</td>
<td>C015</td>
<td>C + 15</td>
</tr>
<tr>
<td>ADD TO FM</td>
<td>9AU</td>
<td>Add record to FMID 9AU.</td>
</tr>
</tbody>
</table>
The screen also provides the ability to plan an intermediate stop to reconfigure cargo and personnel. The data fields pertaining to the intermediate location are:

**INT** Enter mode, source, load conf, disch, const, and geo code as above with POE, POD and DEST.

**DAYS-DELAY** Requires numeric entry.

**TYPE**
- **F** - Delay applies to incremental/fractions of the force.
- **T** - Delay applies to entire/total force.

**LOCATION**
- **A** - After the POD
- **B** - Between the POE and POD
- **C** - Before the POE

<**Xmit**> to view PART 2 of the FORCE REQUIREMENT DATA display.

---

**Figure 7.2 Force Requirement Data (Part 2 of 2)**

As this is a high priority unit, enter A in the CRITICAL EMPLOYMENT INDICATOR field, as in Figure 7.2.

Fields you may enter, but we are leaving blank during the training session:

**PROJECTED DAYS LATE**

**ALTERNATE POE/POD**

**TFE (Transportation Feasibility Estimator) POE BEGIN LOAD DATE and TFE POD FEASIBLE ARRIVAL DATE**

**RESET AUTHO PERS/PAX/CARGO/FIC**
This allows you to reset the cargo/personnel characteristics to TUCHA for standard type units. The FIC (Force Indicator Code) changes to 0.

**PORTS OF SUPPORT** - Enter GEO codes as appropriate.
Scheduling data, if available and displayed, cannot be modified on this screen.

In order to review entries on Part 1, enter X at TO RETURN TO PART 1 AFTER COMPLETION.

Press <xmit>. The display returns to the one found in Figure 7.1 with the addition of several more fields filled in by the TUCHA file.

The TUCHA file completes the following data fields:

ULC
SERVICE
FORCE DESCRIPTION
STONS-BULK/OVER/OUT/NAT/TOTAL
MTONS-BULK/OVER/OUT/NAT/TOTAL
AUTHORIZED PERSONNEL
PAX REQUIRING TRANSPORT

The Supporting Commander enters the following data:

UIC
ORIGIN RLD
POE MODE/SOURCE/GEO CODE/ALD

The SORTS (Status of Resources and Training System) file completes the UNIT NAME and ORIGIN GEO CODE.

Optional entries: SERVICE RESERVED, PROJECT CODE AND RESERVED NON-BASELINE.

<xmit> and the data fields display blank with a message at the bottom of the screen, "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

The new ULN, 9AAJ, is added to FMID 9AU.

A good practice is to review newly created or modified requirements using S/F BE. This display spells out many of the codes, allowing you to catch errors you might have missed. A transposition error can change a destination to Penhook, VA (TALP) rather than the desired Tozur, Tunisia (TPAL)!

Enter BE or *BE where allowed and <xmit>.

Enter 9AAJ at ENTER ULN FOR DETAIL DISPLAY. <Xmit>. The ULN Detail Display screen appears for ULN 9AAJ.
The display, as seen in Figure 7.3, confirms the information entered about ULN 9AAC.

It is also possible to create groups of force records. This is demonstrated in the following scenario.

**Situation.** A shortage of potable water exists at the planned deployment location. You are tasked to **add two** water purification teams to the OPLAN.

Enter **B9** or **B9** where allowed, to add this new group of force records. <Xmit>. The Range Update/Delete of ULNs, CINs, or PINs screen appears.

![Figure 7.3 ULN Detail Display](image1)

![Figure 7.4 Range Update/Delete of ULNs, CINs, or PINs](image2)
Enter the following data as it appears in Figure 7.4:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELECT TYPE OF UPDATE</td>
<td>C</td>
<td>Selects group.</td>
</tr>
<tr>
<td>SELECT TYPE OF DATA</td>
<td>A</td>
<td>Selects ULN.</td>
</tr>
<tr>
<td>SELECT PROCESS</td>
<td>B</td>
<td>Selects add requirement.</td>
</tr>
<tr>
<td>SELECT TYPE OF ERROR</td>
<td>B</td>
<td>Processing interrupted</td>
</tr>
<tr>
<td>PROCESSING</td>
<td></td>
<td>to correct input errors.</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>B</td>
<td>Selects timesharing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Batch is for large number</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of records.</td>
</tr>
</tbody>
</table>

Press <xmit> and the Range Update/Delete of ULNs, CINs or PINs screen (Screen RQ-902) is displayed.

Figure 7.5 Range Update/Delete of ULNs, CINs or PINs

Enter 9ATA1 and 9ATA2 for the two water teams as in Figure 7.5 and <xmit>. Figure 7.4 is displayed again with a message at the bottom of the screen: "TOTAL REQS IN RANGE = 002. TRANSMIT TO CONTINUE OR CHANGE S/F TO EXIT". Press <xmit>. The Force Requirement Data (part 1 of 2) screen is displayed.
Make the following entries for the water teams, as indicated in Figure 7.6:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTC</td>
<td>44PPP</td>
<td></td>
</tr>
<tr>
<td>PROVORG</td>
<td>7</td>
<td>FORSCOM.</td>
</tr>
<tr>
<td>POD MODE</td>
<td>A</td>
<td>Air movement.</td>
</tr>
<tr>
<td>POD SOURCE</td>
<td>K</td>
<td>MAC-provided aircraft.</td>
</tr>
<tr>
<td>POD LOAD CONF</td>
<td>A</td>
<td>Administratively loaded.</td>
</tr>
<tr>
<td>POD DISCH CONST</td>
<td>N</td>
<td>No special consideration.</td>
</tr>
<tr>
<td>POD GEO CODE</td>
<td>JEAH</td>
<td>Jerba.</td>
</tr>
<tr>
<td>POD EAD</td>
<td>C007</td>
<td>C-Day + 7.</td>
</tr>
<tr>
<td>POD LAD</td>
<td>C012</td>
<td>C-Day + 12.</td>
</tr>
<tr>
<td>POD PRIORITY</td>
<td>200</td>
<td>Combat support units start at 200.</td>
</tr>
<tr>
<td>POD PRIORITY ADD-ON</td>
<td>A</td>
<td>Differentiates between same POD priority.</td>
</tr>
<tr>
<td>DEST MODE</td>
<td>L</td>
<td>Land transportation.</td>
</tr>
<tr>
<td>DEST SOURCE</td>
<td>H</td>
<td>Self-deploy.</td>
</tr>
</tbody>
</table>

Figure 7.6 Force Requirement Data (Part 1 of 2)
DEST LOAD CONF A Administrative configuration.

DEST DISCH CONST N No special consideration.

DEST GEO CODE FTZH El Borma.

DEST RDD C017 C-Day + 17.

ADD TO FORCE MODULES 9AU Adds the force record to FM 9AU.

<Xmit>. The display is Force Requirement Data (Part 2 of 2).

Figure 7.7 Force Requirement Data (Part 2 of 2)

Make the following entries, corresponding to those in Figure 7.7:

Enter X TO RETURN TO PART 1.

Enter K at CRITICAL EMPLOYMENT INDICATOR.

<Xmit>. Figure 7.6 is redisplayed.

After verifying that all the entries are correct, blank out the X in PART 1. <Xmit>.

Review the new records using S/F BE. Enter X at DISPLAY ULN DATA ON FMID and <xmit>. Enter PAGE 3 on the command line to verify the ULN additions of 9ATA1 and 9ATA2. Press <xmit> and OPLAN 911PC ULN Data is displayed.
Figure 7.8 ULN Data

Note the presence of the two new ULN's, 9ATA1 and 9ATA2, as seen in Figure 7.8.

Clone Force Records. The Operations Plans Officer is directed to add an additional antiarmor company to OPLAN 911PC.

Based on a review of the force list, use ULN 9AAG as the source record and ULN 9AAG1 for the target record.

Enter S/F B2 or *B2, where allowed, and <xmit>. The Duplicate ULNs screen is displayed.

Figure 7.9 Duplicate ULNs

Using Figure 7.9 as a model, enter ULN 9AAG in the FROM ULN field and 9AAG1 in the TO ULN data field. <xmit>. A message is displayed at the bottom of the screen, "TRANSACTION QUEUED; SYSTEM LOAD MAY CAUSE DELAYS; XMIT TO CONTINUE".

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Change single records. The USMEDCOM staff supports your tank company addition. However, they task you to make some changes due to over-scheduling into the El Borma airfield.

S/F BL changes single records, while S/F B9 executes the change for groups of records. S/F B9 will also change single records but requires more steps and hence consumes more time.

Enter S/F BL or *BL, where appropriate, and <xmit>.

The Force Requirement Data screen appears.

```
<table>
<thead>
<tr>
<th>Origin</th>
<th>Poe</th>
<th>Pod</th>
<th>Priority</th>
<th>Poe</th>
<th>Pod</th>
<th>Priority</th>
<th>ALD</th>
<th>Priority</th>
<th>Add-On</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pod Geo Code</th>
<th>Dest Load Conf</th>
<th>Dest Geo Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>JEAH</td>
<td>A</td>
<td>FTZH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Days-Delay</th>
<th>Type</th>
<th>Location</th>
<th>STONS</th>
<th>MTONS</th>
<th>Authorized Personnel</th>
<th>Pax Requiring Transport</th>
<th>Pax</th>
<th>Add To Force Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>22.0</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.0</td>
<td>153</td>
<td>88</td>
<td>971.0</td>
<td>1569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Review the current status of the tank company by entering R in FUNCTION CODE, 9AAJ in ULN and <xmit>.

Enter the following data, as in Figure 7.10, to reflect the desired changes to the tank company tasking:

Data Field | Entry | Remarks
---|---|---
FUNCTION CODE | C | Selects change function.
POD GEO CODE | JEAH | Jerba.
DEST LOAD CONF | A | Administratively configured.
DEST GEO CODE | FTZH | El Borma.

Press <xmit> to process the new information. The screen displays blank with message "TRANSACTION QUEUED; SYSTEM LOAD MAY CAUSE DELAYS".

Source Force Records. JCS approved the addition of the tank company to the force list. Now you must source the tank company.

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To source the tank company and change data, enter S/F BL and <xmit>.

Enter R (REVIEW) in FUNCTION CODE.
Blank out the X for PART 2.
Enter ULN 9AAJ (for the tank company).
<xmit>. The previously entered data will display.

Enter C in FUNCTION CODE and make the following entries:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>UIC</td>
<td>WHPNA9</td>
<td>UIC of tasked unit.</td>
</tr>
<tr>
<td>UNIT NAME</td>
<td>SORTS file generates.</td>
<td></td>
</tr>
<tr>
<td>ORIGIN GEO CODE</td>
<td>SORTS file generates.</td>
<td></td>
</tr>
<tr>
<td>ORIGIN RLD</td>
<td>C003</td>
<td>C-Day + 3</td>
</tr>
<tr>
<td>POE MODE</td>
<td>L</td>
<td>Land movement to POE.</td>
</tr>
<tr>
<td>POE SOURCE</td>
<td>H</td>
<td>Organic transportation.</td>
</tr>
<tr>
<td>POE GEO</td>
<td>CYWF</td>
<td>Campbell AAF.</td>
</tr>
<tr>
<td>POE ALD</td>
<td>C004</td>
<td>C-Day + 4.</td>
</tr>
</tbody>
</table>

Once the data is entered, <xmit>. When the processing completes, review the updated record via the SUBSYSTEM/FUNCTION BE.

Tailor Force Cargo Data. Airlift constraints cause 1 CAV Division Plans Officer to request a reduction in the number of tanks in ULN 9AAJ from 17 to 13 and the deletion of the recovery vehicle.

S/F B7 allows you to review, add, change or delete cargo detail data for a specific ULN.

Enter B7 or *B7 where allowed and <xmit>. The Tailor Force Cargo menu is displayed.
Figure 7.11 Tailor Force Cargo

Make the following entries as they appear in Figure 7.11:

Enter 9AAJ in ULN field.

Enter X to REVIEW OR ADD/CHG/DEL CARGO CATEGORY CODES <Xmit>. ULN Cargo Characteristics (level 3 cargo summary information) is the resulting screen.

Figure 7.12 ULN Cargo Characteristics

Let's take a look at the Cargo Category Code (CCC) structure to assist our understanding of Figure 7.12. Enter X at TABLE and <xmit>. The Force Cargo Category Code Table is displayed, providing a breakdown of the codes in Figure 7.12.
Additional codes not shown on the table in Figure 7.13 are those of the second character code for nonunit cargo:

A - Nat Nonunit Cargo
B - Outsize Nonunit Cargo
C - Oversize Nonunit Cargo
D - Bulk Nonunit Cargo

The CCC for the tanks and recovery vehicle is A1D.

Press <xmit> to return to the screen depicted in Figure 7.12. <Xmit> again and return to the Tailor Force Cargo Screen. Enter X at REVIEW OR ADD/CHG/DEL CARGO DETAIL FOR CAT [ ]. Enter A1D in the CAT brackets. <Xmit>.

Tailor Cargo Detail Characteristics is displayed with level 4 cargo detail data. Level 4 is Detail by Type Equipment, i.e., quantity by type of equipment, square feet, dimensions and tonnages.
Review the information provided on the screen. First, the ULN is indeed 9AAJ and the CAT is AID. Summary tonnages, heavy lift classification (E) and the number of cargo detail records (2) are provided.

Enter 1 at ENTER START DET NBR. <Xmit>. Figure 7.14 is displayed with the cargo detail data beginning with detail number 1.

First delete the recovery vehicle. Enter D at A/C/D. <Xmit>. Figure 7.14 is displayed with the vehicle deleted.

Now, to change the number of tanks, make these two entries:

C at A/C/D to initiate the change process.

013 at NBR PCS to change the total number of tanks to 13.

<Xmit>. The screen redisplays with the new data. When all actions are completed, enter END at ENTER START DET NBR OR 'END' at the upper right portion of the screen, <Xmit>. The Review Force Cargo Category Record screen is displayed. Totals recalculate after changes to number of pieces and additions or deletions of cargo detail records.

CAUTION: If you transmit Figure 7.14 with changes and enter a different function code, you exit without updating the detail at levels 2 and 3; only level 4 is updated. Level 3 is detail by category, i.e., tonnages and square feet for a cargo category.

---

**Figure 7.15 Review Force Cargo Category Record**

The old and new level 3 cargo detail totals for ULN 9AAJ, CAT A1D, display as in Figure 7.15.

<Xmit> to accept the update as shown. Tailor Force Cargo, Figure 7.11, is displayed.
<Xmit> to accept the update as shown. Tailor Force Cargo, Figure 7.11, is displayed.

To review the changes made to AID, enter X at REVIEW CARGO DETAIL ONLY FOR CAT [ ], AID at CAT and <xmit>. Review Cargo Details is displayed (Figure 7.16) with level 4 cargo detail data.

<table>
<thead>
<tr>
<th>SEQ</th>
<th>CARGO NBR</th>
<th>DESCRIPTION</th>
<th>DIMENSION-INCHES</th>
<th>SQUARE NBR</th>
<th>DESCR</th>
<th>I</th>
<th>PTI</th>
<th>ON</th>
<th>LGTH</th>
<th>WDT</th>
<th>HGT</th>
<th>PCS</th>
<th>FEET</th>
<th>STONS</th>
<th>MTONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>T13169TANK COM</td>
<td>325 143 130 13</td>
<td>323</td>
<td>54.0</td>
<td>87.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 7.16 Review Cargo Details

**Tailor Force Record.** The 1st CAV Division identifies a requirement for two additional cargo trucks. They plan to transfer them from Division assets to the tank company. The Equipment Identification Code (EIC) for the trucks is 2053901. Also, the unit plans to load 2.5 STONS of cargo on one truck.

The TUDET (Type Unit Equipment Detail File) provides additional information on these cargo trucks. Enter S/F FG and <xmit>. The TUDET Retrieval screen appears.

Before proceeding with this screen, press the F4 key (CODES), place the cursor over EQUIPMENT IDENTIFICATION CODE, and <xmit>. A list of equipment by EIC, Description and CCC appears. Locate the 2.5T cargo truck. As you can see, the EIC is 20553901 and the CCC, A2H (error on screen, should read A2D).

EXIT the Codes portion of the program and return to S/F FG.

Enter A for SELECTION CRITERIA of EIC. <Xmit>. Enter 2053901 at EIC and <xmit>. The TUDET - Output Selection screen displays. Enter B at DISPLAY OUTPUT REPORT and <xmit>. The screen is "Display of TUDET Data".

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With this information in hand, illustrated in Figure 7.17, return to tailor the cargo force record by entering END and <xmit>. Enter S/F B7, or *B7 on the command line, and <xmit>.

Figure 7.11 is displayed and requires some entries.

Enter 9AAJ at ENTER ULN.

Enter X at ADD LOADED CARGO DETAIL USING EIC (LIN)

Enter A2D at CAT.

<xmit>. The screen before you should be Add Loaded Cargo Detail by EIC.

Enter the following data in order to add the two cargo vehicles, one with a secondary cargo load, to ULN 9AAJ. Figure 7.18 contains the new entries.

**Data Field**  | **Entry**  | **Remarks**  
--- | --- | ---  
CARGO EIC | 2053901 | Copies vehicle statistics from TUDET file based on EIC.
NBR PCS 001 (twice) Number of pieces.

STONS 2.5 (once) Secondary load used to identify cargo.

This function does not execute in JOPESCAI; normally, after transmitting, there would be a validation display.

The Force Records portion of the training is complete. The next section addresses Nonunit Records, also part of the B Subsystem.
VIII. NONUNIT RECORDS

General Situation. Hostile Libyan troops continue to mass along the eastern Tunisian border. Intelligence reports indicate invasion is still imminent. USMEDCOM completed COA development and forwarded it to JCS. JCS will present the COA to the National Command Authorities (NCA) shortly, initiating CAP Phase IV (COA Selection).

The Logistics and Personnel Commands continue to review logistical support for the selected COA. The addition of the tank company requires modification of ammunition resupply for the period C010 through C030, when sealift begins arriving. Approval to move three increments of ammunition, each weighing 21.4 STONS with LADs of C010, C020 and C030 to El Borma is received. Congestion at El Borma airfield requires using Jerba as the POD.

As the Army Materiel Command (AMC) Plans Officer, you must add the ammunition CINs to the OPLAN.

CIN/PIN. Cargo Increment Numbers (CIN) and Personnel Increment Numbers (PIN) are seven-digit codes. Each Joint Headquarters and the Services are allocated specific CIN/PIN ranges. CINs/PINs identify movement requirements in JOPES. Actual resupplies must be requested through normal Service channels.

Let's first check the OPLAN nonunit cargo data and determine what CIN numbers are available for the required ammunition.

Enter S/F BX to return to the REQUIREMENTS SUBSYSTEM menu. On the command line enter JSIT command C; <xmit>. Figure 8.1 is a display of the NON UNIT CARGO DATA for OPLAN 911PC.

**Figure 8.1 Nonunit Cargo Data**
The first letter in the CIN indicates the service (A-Army, F-Air Force, M-Marine Corps), the second is a cargo code for the CIN. Two cargo codes are used on this screen:

A - Support for forces required before normal resupply

R - Resupply

The next two positions in the code refer to the OPLAN series. The last three positions uniquely identify each CIN.

Three new CINs are required for this ammo resupply, no ammunition resupply CINs are in use. Set up a schedule for movement dates with the appropriate staff and commands that will cover the time frame desired. The schedule below is established:

<table>
<thead>
<tr>
<th>CIN</th>
<th>ALD</th>
<th>EAD</th>
<th>LAD</th>
<th>RDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR90100</td>
<td>C003</td>
<td>C005</td>
<td>C010</td>
<td>C015</td>
</tr>
<tr>
<td>AR90101</td>
<td>C013</td>
<td>C015</td>
<td>C020</td>
<td>C025</td>
</tr>
<tr>
<td>AR90102</td>
<td>C023</td>
<td>C025</td>
<td>C030</td>
<td>C035</td>
</tr>
</tbody>
</table>

Adding a group of CINs is possible using the S/F B9 menu. Enter *B9 on the command line or S/F B9 and <xmit>. The display Range Update/Delete of ULNs, CINs, or PINs appears on the screen.

Figure 8.2 Range Update/Delete of ULNs, CINs, or PINs

Enter the following selections as per Figure 8.2:

TYPE OF UPDATE: C

TYPE OF DATA TO BE PROCESSED: B
PROCESS TO BE PERFORMED: B

TYPE OF ERROR PROCESSING: B

PROCESSING ENVIRONMENT: B

Press <xmit>. Screen RQ-902, Range Update/Delete of ULNs, CINs, or PINs is displayed.

```
091645ZEB
RANGE UPDATE/DELETE OF ULNS, CINs, OR PINs
OPLAN 911PC
ENTER CINS TO BE ADDED . FIRST BLANK FIELD IS END OF GROUP

[AR90001] [AR90002] [AR90003]
[               ] [               ] [               ]
[               ] [               ] [               ]
[               ] [               ] [               ]
[               ] [               ] [               ]
[               ] [               ] [               ]

PLEASE ENTER REQUIREMENT NUMBERS
```

Figure 8.3 Range Update/Delete of ULNs, CINs or PINs

Up to 56 entries may be made in the screen depicted in Figure 8.3. Enter the CINs AR90001, AR90002, and AR90003. <Xmit>.

You are back at the B9 screen (Figure 8.2). A message is displayed at the bottom: TOTAL REQS IN RANGE = 003. TRANSMIT TO CONTINUE OR CHANGE S/F TO EXIT.

<Xmit>. The screen UPDATE CIN/PIN IDENT/Routing DATA is displayed for you to complete.

Two fields are already filled:

REC TYPE C

CIN/PIN RANGE
The AMC Plans Officer completes the following required data fields, adding the ammunition records to the force list, as Figure 8.4 illustrates.

### Data Field Entry Remarks

<table>
<thead>
<tr>
<th>Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROVORG</td>
<td>A</td>
<td>Army</td>
</tr>
<tr>
<td>CARGO/PAX DESCRIPTION</td>
<td>AMMO RESUPPLY</td>
<td>Free field for description.</td>
</tr>
<tr>
<td>STONS</td>
<td>21.4</td>
<td>Short tons for movement.</td>
</tr>
<tr>
<td>SUPPLY CLASS</td>
<td>5W</td>
<td>Class/subclass of resupply. 5 - ammunition; W - ground.</td>
</tr>
<tr>
<td>CARGO-CAT-CODE</td>
<td>MDD</td>
<td>Cargo category. M - ammunition; D - bulk nonunit cargo, D - not containerized</td>
</tr>
<tr>
<td>HVY-LFT</td>
<td>A</td>
<td>Lift requirements. Palletized in loads of less than 5 short tons each.</td>
</tr>
<tr>
<td>FORCE MODULE</td>
<td>9AU</td>
<td>Adds to FM 9AU.</td>
</tr>
<tr>
<td>ORIGIN GEO</td>
<td>UAUW</td>
<td>Red River Army Depot</td>
</tr>
<tr>
<td>POE MODE</td>
<td>L</td>
<td>Land transportation</td>
</tr>
<tr>
<td>POE SOURCE</td>
<td>G</td>
<td>Provided by MTMC.</td>
</tr>
</tbody>
</table>
POE GEO WWYK Tinker AFB
POE ALD C003 C-Day + 3 days
POD MODE A Air movement to POD.
POD SOURCE K Aircraft MAC-provided
POD GEO JEAH Jerba
POD EAD C005 C-Day + 5 days
POD LAD C010 C-Day + 10 days
DEST MODE L Land transportation
DEST SOURCE D USMEDCOM provides transport to destination.
DEST GEO FTZH El Borma.
DEST RDD C015 C-Day + 15 days.

<Xmit>. The system then processes the information and the message "PROCESSING COMPLETE; PLEASE ENTER AN OPTION" appears. The new records have been added to the data base.

In Figure 8.4, all three CINs were given the same movement data. The arrival dates for CINs AR90002 and AR90003 are incorrect.

S/F B4 permits us to change the CIN records. Enter B4 and <xmit> to receive the Update CIN/PIN Ident/Routing Data screen.

Figure 8.5 Update CIN/PIN Ident/Routing Data
The UPDATE CIN/PIN IDENT/ROUTING DATA screen requires some initial entries:

<table>
<thead>
<tr>
<th>Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNCTION CODE</td>
<td>R</td>
<td>Review</td>
</tr>
<tr>
<td>REC TYPE</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CIN/PIN</td>
<td>AR90002</td>
<td>CIN selected for review.</td>
</tr>
</tbody>
</table>

<Xmit>.

The CIN data for AR90002 appears for review on the same screen.

To change the CIN data, enter C (Change) in FUNCTION CODE.

Other fields to change (as in Figure 8.5) are:

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>POE ALD</td>
<td>C003</td>
</tr>
<tr>
<td>POD EAD</td>
<td>C005</td>
</tr>
<tr>
<td>POD LAD</td>
<td>C010</td>
</tr>
<tr>
<td>DEST RDD</td>
<td>C015</td>
</tr>
</tbody>
</table>

Compare your entries with Figure 8.5 and then <Xmit>. The same procedure may be carried out for AR90003.

Let's review the change made in CIN AR90002. Enter S/F BE and <Xmit>, followed by entering AR90002 at ENTER CIN FOR DETAIL DISPLAY and <Xmit>; or enter JSIT command C AR90002 on the command line and <Xmit>. The CIN Detail Display is exhibited.

Figure 8.6 CIN Detail Display
From the Figure 8.6 display for CIN AR90002 we can confirm that the data is correctly entered.

**OPLAN Review.** JCS review of the OPLAN reveals a void in the force list - noncombatant evacuees. USMEDCOM must provide the information for the OPLAN, requiring building a PIN (Personnel Increment Number). Potential evacuees number 3,000. Date for evacuation set at C002. An airlift from Jerba to McGuire AFB is scheduled. Assign PIN AE90001 for noncombatant evacuees.

Enter B4 or *B4, where allowed, and <xmit>. The Update CIN/PIN screen is displayed.

```
| FUNCTION CODE | A         | Add a record. |
| REC TYPE      | P         | PIN.          |
| CIN/PIN       | AE90001   | PIN assignment to noncombatant evacuees. |
| PROVORG       | A         |               |
| CARGO/PAX     | NEO       | Noncombatant evacuees. |
| PAX           | 3000      |               |
```

**Figure 8.7 Update CIN/PIN Ident/Routing Data**

Since this is a familiar screen (refer to discussion of Figure 8.5), only some of the entries for Figure 8.7 require further explanation:
ORIGIN GEO  JEAH  Jerba.
POE MODE/SOURCE  X  Origin and POE are the same.
POE GEO  JEAH  .
POE ALD  C002  .
POD MODE  A  .
POD SOURCE  K  .
POD GEO  PTFL  McGuire AFB.
POD EAD  C002  .
POD LAD  C004  .
DEST MODE/SOURCE  X  POD and destination are the same.
DEST GEO  PTFL  .
DEST RDD  C004  .

<Xmit>. The system then processes the transaction. Figure 8.7 displays blank with the message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

Like the previous CIN record, the PIN record may be reviewed using S/F BE or JSIT command P AE90001. The first method requires an extra step (enter AE90001 at ENTER PIN FOR DETAIL DISPLAY AND <xmit>), but both ultimately display the same screen, PIN Detail Display, and allow you to verify the entries.

More Noncombatants. JCS reviews the USMEDCOM noncombatant evacuee record and requests that MEDCOM add another requirement for an additional 3,000 personnel to depart Jerba on C005 to McGuire.

Use SOURCE PIN AE90001 and TARGET PIN AE90002. Adjust movement dates as necessary.

To clone PIN AE90001:

Enter *B4 on the command line or S/F B4 and <xmit>.
Displays blank screen RQ-401 (Figure 8.7).
Enter R in FUNCTION CODE.
Enter P in REC TYPE.

Enter AE90001 in CIN/PIN.

<Xmit>.

Screen RQ-401 displays with the data.

Change the FUNCTION CODE to A.

Change CIN/PIN to AE90002.

Change dates:

Enter C005 in POE ALD
Enter C006 in POD EAD
Enter C009 in POD LAD
Enter C009 in DEST RDD

<Xmit>.

Displays message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS". The new record is added to the force list.

The nonunit record portion of this manual is now complete. In the next section, carrier scheduling and movement are covered.
General Situation. Tunisian government reports indicate further deterioration in conditions along the border. United Nations appeals for mediation have been ignored. Due to the bleak outlook, the President authorizes JCS to issue a Planning Order as part of CAP Phase V (Execution Planning).

A summary of the planning order is as follows: USMEDCOM is to conduct execution planning in preparation for possible execution of OPLAN 911PC and submit implementing instructions for NCA consideration. A joint task force composed of several force module major combat units is specified.

The Transportation Component Commands pulled the initial validated portion of the force list to schedule and manifest carriers. MAC has already pushed the first four days of the schedule and manifested carriers into the JOPES data base.

Return to the JOPES Master Menu, enter E in SUBSYSTEM CODE and \(<\text{xmit}\)>. The extensive Scheduling and Movement Subsystem Menu is displayed (Figure 9.1).

The functions in Figure 9.1 allow you to review, update, schedule and manifest TCC carrier and organic movement information before and during deployment. The menu options are divided into four sections.

The first functions listed, E through J, are related to TCC CARRIER information. The second set, K through O, are concerned with ORGANIC MOVEMENT information. Next, P through W contain a miscellaneous set of functions and finally, 1 through 8 permit a number of reports to display and print.
Here, in more detail, is a list of the functions along with their purpose:

<table>
<thead>
<tr>
<th>Function Code</th>
<th>Function Code</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>F</td>
<td><strong>Purpose</strong></td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>Add TCC carrier identification and itinerary, or delete individual TCC carrier records.</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>Change existing data for TCC carrier identification and itinerary. Cloning permitted.</td>
</tr>
<tr>
<td></td>
<td>J</td>
<td>Insert new TCC carrier itinerary information.</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>Add stops to the end of an existing TCC carrier itinerary.</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>Divert TCC carriers already manifested and maintain the manifest.</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>Add organic movement identification and itinerary, or delete individual organic movement records.</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>Insert new organic movement itinerary information.</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>Add stops to the end of an existing organic movement itinerary.</td>
</tr>
<tr>
<td></td>
<td>Q</td>
<td>Divert organic movement already manifested and maintain the manifest.</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>Add, change, and delete MSC sea manifests.</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>Add, change, and delete manifests of either TCC or organic movement carriers.</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>Update JOPES with actual movement departure and arrival times.</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>Display all itinerary or manifest information for a specific carrier (TCC or organic).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Display movement scheduled for a designated port on specific dates.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Display TCC carrier/organic movements departing their first onload point between specified dates.</td>
</tr>
</tbody>
</table>
Override leg codes after manifesting completed. Use restricted to FDBMs.

1 Print a report of complete carrier, itinerary, and manifest information for all movements in an OPLAN between specified dates.

2 Print a report showing movement manifests scheduled to depart onload/offload points between specified dates.

3 Print a report of channelized requirements not fully manifested.

4 Print a report comparing passengers and cargo required to arrive by EAD/LAD with the actual or assumed delivery schedule.

5 Print a report showing all movements to, from and through selected ports on specific dates.

7 Print a report which shows all requirements and their scheduled movements between specific dates.

8 Print a report showing FM movement summary information.

Some background information on carriers will aid your comprehension of this module. The three Transportation Component Commands (TCCs) are Military Airlift Command (MAC), Military Sealift Command (MSC) and Military Traffic Management Command (MTMC). Movement requirements are scheduled on one of their vehicles or on organic carriers.

JOPES scheduling and manifesting is based on the mode and source codes identified for each movement leg; for example, origin to POE, POD to destination. A list of mode and source codes used in CAI are available through the Codes Menu, found by pressing the F4 key.

**Carrier Movement Data.** To obtain carrier names for specific ULNs, recall Figure 4.7. ULN 9AAC is scheduled on MAC carrier T00466. Enter S/F ET or *ET on the command line. <Xmit> to receive the Display TCC Carrier/Organic Movement screen.
The screen displayed in Figure 9.2 requires some entries. First, enter T00466 at CARRIER NAME/UNIQUE DESCRIPTION.

Then, three selections are possible: ITINERARY, MANIFEST and CHANGE/DIVERSION REMARKS.

Enter an X at ITINERARY and an X at MANIFEST to obtain movement data for carrier T00466.

<Xmit>. The screen appearing is titled "TCC Carrier/Organic Movement Itinerary".

Review the same display in Figure 9.3. Note that a maximum of six Geo locations are permitted in JOPESCAI.

STOP CODES are:

- A - Airdrop
- B - Both onload/offload
- E - Enroute
- O - Onload
- P - Position
- R - Air refuel
- T - Terminate
- U - Offload (Unload)
Press `<xmit>` to receive the manifest data shown in the next screen, TCC Carrier/Organic Movement Manifest.

```
092300Z FEB OPLAN 911PC TCC CARRIER/ORGANIC MOVEMENT MANIFEST
SM-T04
NAME T00466

<table>
<thead>
<tr>
<th>ROUTING FROM ONLOAD THRESH</th>
<th>GEO CODE</th>
<th>GEO NAME</th>
<th>POPE AFB TOTAL MANIFESTED</th>
<th>PAX</th>
<th>STONS</th>
<th>MTONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO UNLOAD FTMK EL BORJA</td>
<td></td>
<td></td>
<td></td>
<td>200</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>AND REMAINING</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0.9</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U/LN/CIN/PIN</th>
<th>PAX</th>
<th>S-BULK</th>
<th>S-OVER</th>
<th>S-OUT</th>
<th>TOT STONS</th>
<th>MTONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9AAC</td>
<td>200</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0</td>
</tr>
</tbody>
</table>

XMIT FOR NEXT PAGE, OR ENTER JSIT COMMAND, OR **SF**
[END OF MANIFEST FOR ONLOAD-TMKN UNLOAD-FTMK]
```

**Figure 9.4 TCC Carrier/Organic Movement Manifest**

Short ton (STONS) and passenger (PAX) details are provided for carrier T00466 in Figure 9.4.

**Port Workload Status.** USTRANSCOM receives word that construction at Torrejon AB, Spain (GEO Code XBGX) will not be completed on schedule and may impact OPLAN execution. MAC is notified and its Operation Officer evaluates diverting the first four days of scheduled airlift.

**S/F EU** displays movement for a specific location.

```
100947FEB 911PC DISPLAY MOVMT FOR SPECIFIC LOCATION SUBSYSTEM CODE [E]
SM-U101 X=MENU, J=EXIT JSIT OR FUNCTION CODE [U]

TO SEE ALL CARRIERS (TCC/ORGANIC) OR ONLY MANIFESTED CARRIERS GOING THROUGH A SPECIFIC LOCATION IN A SPECIFIC DATE RANGE FOR THE OPLAN INDICATED ABOVE. (INPUT DATE FORMAT IS DDHHMMZMMYY)

ENTER GEO [XBGX]
ENTER START DATE [2100011ZOCT91]
ENTER STOP DATE [242352ZOC91]

ENTER 'X' IN ONE OPTION BELOW
(X) ALL CARRIERS
( ) MANIFESTED CARRIERS THAT WILL ONLD/OFLD AT ABOVE GEO

XMIT IF DONE, OR ENTER JSIT COMMAND, OR **SF**
```

**Figure 9.5 Display Movement For Specific Location**

Enter S/F EU or *EU on the command line, `<xmit>`.
Make the following entries as displayed in Figure 9.5:

GEO CODE: XBGX (for Torrejon AB, Spain)

START DATE: 210001ZOCT91

STOP DATE: 242359ZOCT91

Select ALL CARRIERS and enter X.

<Xmit>. Figure 9.6 is a display of the schedule through Torrejon AB during the specified time period.

```
<table>
<thead>
<tr>
<th>CARRIER NAME/</th>
<th>UNIQUEN</th>
<th>SOURCE</th>
<th>ARRIVE</th>
<th>DEPART</th>
<th>CODE</th>
<th>PAX</th>
<th>STONS</th>
<th>TOTAL</th>
</tr>
</thead>
</table>
| SM-UO2        | T00448  | 100948ZFEB | T00448 | 210350ZOCT | T00448 | 210605ZOCT | T00448 | 70
| SM-UO2        | T00455  | 210550ZOCT | T00455 | 210805ZOCT | T00455 | 211005ZOCT | T00455 | 70
| SM-UO2        | T00462  | 211020ZOCT | T00462 | 211240ZOCT | T00462 | 211240ZOCT | T00462 | 70
| SM-UO2        | T00681  | 240200ZOCT | T00681 | 240515ZOCT | T00681 | 240515ZOCT | T00681 | 70
```

Figure 9.6 Movement For Specified GEO and Date Range

Movement for each day is displayed. Four carriers are scheduled to arrive 21 October, one on 24 October and none on 22 and 23 October.

MAC PULL. MAC has pulled the first six days of USTRANSCOM validated requirements for OPLAN 911PC. Once scheduling is completed, they will push the first four days back to USTRANSCOM.

Now we are interested in viewing a list of carriers from the first onload point.

Enter S/F EV or *EV, where permitted, and <Xmit>. The TCC/Organic Movement List Options screen is displayed.
Figure 9.7 TCC/Organic Movement List Options

The following data entries are required, as in Figure 9.7:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>START DATE</td>
<td>210001ZOC91</td>
<td>C-Day, C000.</td>
</tr>
<tr>
<td>STOP DATE</td>
<td>242359ZOC91</td>
<td>C003.</td>
</tr>
<tr>
<td>SELECT TYPE</td>
<td>X at MAC</td>
<td>Selects MAC movements.</td>
</tr>
</tbody>
</table>

<Xmit> to receive the TCC Carrier/Organic Movements display.

Figure 9.8 TCC Carrier/Organic Movements

The display, Figure 9.8, reveals eight carriers, the type carrier and its source or service. It also shows that no carriers have been changed or diverted. All are currently manifested, although the exact percentages are not indicated.
Reports. Several printed reports are available in JOPES, permitting you to monitor and review scheduling and manifest information. Each lets you specify the time period and TCC or organic carrier. We'll look at the screens that generate the reports although the actual report output is not available to us online.

Continue to look at the same four day time frame, the first four days of the operation according to OPLAN 911PC.

Enter S/F E1 or *El on the command line, and <xmit>. The Movement Schedule Report screen is displayed.

![Figure 9.9 Movement Schedule Report]

Enter the following in the prescribed data fields to complete Figure 9.9:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>START DATE</td>
<td>210001ZOCT91</td>
<td></td>
</tr>
<tr>
<td>STOP DATE</td>
<td>242359ZOCT91</td>
<td></td>
</tr>
<tr>
<td>CARRIER SOURCE</td>
<td>MAC</td>
<td></td>
</tr>
<tr>
<td>DATE TYPE</td>
<td>X</td>
<td>Selects SCH DEP ONLD</td>
</tr>
</tbody>
</table>

Press <xmit>. The Spawn Batch Job screen (Figure 3.6) is then displayed.

The MOVEMENT SCHEDULE REPORT shows all scheduled and unscheduled manifested carriers and actual movements with complete itinerary and manifest data for the specified date range. It also provides information about the type carrier, configuration, maximum loads, requirement number and unit name or description with
tonnages/passengers manifested for the POE-POD leg. The total manifested for each carrier can be compared to the allowable maximum load to measure carrier utilization.

The next report is the MOVEMENT MANIFEST REPORT. Enter S/F E2 or *E2 on the command line and <xmit>.

| 1011512FEB OPLAN 911PC MOVEMENT MANIFEST REPORT SUBSYSTEM CODE [E] SM-201 |
|--------------------------|---------------------|---------------------|
|                        | X=MENU,2=EXIT JDS OR FUNCTION CODE [2] |
| THIS REPORT WILL SHOW ALL MOVEMENT WITH COMPLETE MANIFEST ONLY FOR OPLAN ABOVE |
| ENTER DATES BELOW IN THE FORMAT DDHHMMZMMMYY. |
| START DATE [210001ZOCT91] STOP DATE [242359ZOCT91] |
| YOU MAY LIMIT THE REPORT TO CARRIER SOURCE BELOW (SELECT ONE OR MORE). |
| MAC [X] MTMC [ ] MSC [ ] ORGANIC [ ] |
| SELECT ONE OF THE FOLLOWING DATE TYPES ('X' TO SELECT) |
| SCH ARR ONLD [ ] SCH DEP ONLD [X] ACT ARR ONLD [ ] ACT DEP ONLD [ ] |
| SCH ARR OPFLD [ ] SCH DEP OPFLD [X] ACT ARR OPFLD [ ] ACT DEP OPFLD [ ] |
| YOU MAY FURTHER LIMIT THE REPORT BY ONE OR MORE OF THE FOLLOWING. |
| PROVORG CODE [ ] |
| SERVICE CODE [ ] |
| UIC [ ] |
| FRID (UP TO THREE) [ ] [ ] [ ] |
| RECORD TYPE ('X' TO SELECT) ULN [ ] CIN [ ] PIN [ ] |
| XMIT IF DONE |

Figure 9.10 Movement Manifest Report

At first glance you may think Figure 9.10 is the same as Figure 9.9. However, the lower portion of the screen is different.

Make the same entries as you did for the previous screen, SM-101 (Figure 9.9).

The MOVEMENT MANIFEST REPORT provides similar information to the MOVEMENT SCHEDULE REPORT. However, it does not list enroute carrier stops and maximum allowable loads. Instead, it provides an executive summary of scheduled and actual movements. It also shows all movement requirements with complete manifest for the OPLAN. The report displays carriers in scheduled onload departure date/time sequence and lists the carrier each time it has an onload. It identifies unit records by ULN, unit name and UIC. It identifies nonunit records by CIN/PIN and description.

Enter <xmit>. The Spawn Batch Job screen (Figure 3.6) appears.

Channelized Requirements Report. You've been asked to deliver a brief on any small requirements that have not been manifested or are partially manifested for OPLAN 911PC during the first four-day increment.

Enter S/F E3 or *E3 on the command line to extract this data. <xmit>. The Channelized Requirements Report is displayed.
Enter the following data as indicated in Figure 9.11:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>START DATE</td>
<td>210001ZOC91</td>
<td>Latest Arrival Date</td>
</tr>
<tr>
<td>STOP DATE</td>
<td>242359ZOC91</td>
<td></td>
</tr>
<tr>
<td>DATE TYPE</td>
<td>X at LAD</td>
<td></td>
</tr>
<tr>
<td>CARRIER SOURCE</td>
<td>X at MAC</td>
<td>Selects MAC.</td>
</tr>
<tr>
<td>SELECT ANY TO BE</td>
<td>X</td>
<td>Select all.</td>
</tr>
<tr>
<td>EXCLUDED</td>
<td>X</td>
<td>Selects to bypass</td>
</tr>
<tr>
<td>BYPASS TCC PRE-</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>EDITS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use this report to ensure that movement requirements are depicted in the proper sequence for each channel.

Press <xmit>. The Spawn Batch Job screen (Figure 3.6) appears.

**Schedule Flow Analysis Report.** This report shows the schedule flow for airlift and/or sealift of passengers and cargo required by EAD or LAD at the POD. It also possesses "what if" capabilities, allowing changes to daily passenger and cargo arrivals to evaluate the impact of increasing or decreasing available lift.

Now enter E4 or *E4, where permitted, and <xmit>. The Schedule Flow Analysis Report is displayed.
Figure 9.12 Schedule Flow Analysis Report

Make the following entries to complete the screen as in Figure 9.12:

Select MAC.

Enter the now familiar START and STOP DATES as before (see Figure 9.11).

Select LAD at DATE TYPE.

Exclude all by placing an X at RETRO, NEO, COMBATANT MEDEVAC AND NON-COMBATANT MEDEVAC.

Enter X at BYPASS TCC PRE-EDITS.

Press <xmit> and the Spawn Batch Job screen (Figure 3.6) displays the usual options.

Port Movement Workload Report. You've been tasked to review workloads at Jerba, El Borma and Torrejon to determine whether any Mobile Aerial Port Squadrons are required.

While similar to the information in S/F EU, here there is the capability to review up to 15 ports rather than one, and six OPLANs versus one.

Enter S/F E5 or *E5, <xmit>. The Port Movement Workload Report is displayed.

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Figure 9.13 Port Movement Workload Report

Enter the following (as in Figure 9.13) to extract the desired information:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHEDULED AND ACTUAL</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>REPORT WITH C-DAY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DECLARED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>START DATE</td>
<td>210001Z0CT91</td>
<td></td>
</tr>
<tr>
<td>STOP DATE</td>
<td>242359Z0CT91</td>
<td></td>
</tr>
<tr>
<td>MAC</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>GEOS</td>
<td>JEAH</td>
<td>Jerba</td>
</tr>
<tr>
<td></td>
<td>FTZH</td>
<td>El Borma</td>
</tr>
<tr>
<td></td>
<td>XBGX</td>
<td>Torrejon</td>
</tr>
</tbody>
</table>

<Xmit>. The Spawn Batch Job screen (Figure 3.6) is displayed.

To view the next report, Deployment Summary Report, enter E7 or *E7, where allowed, and <Xmit>.
Make the following entries to complete the display as in Figure 9.14:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>START DATE</td>
<td>210001ZOC91</td>
<td></td>
</tr>
<tr>
<td>STOP DATE</td>
<td>242359ZOC91</td>
<td></td>
</tr>
<tr>
<td>CARRIER SOURCE</td>
<td>X</td>
<td>Select MAC</td>
</tr>
<tr>
<td>DATE TYPE</td>
<td>X</td>
<td>Select LAD</td>
</tr>
<tr>
<td>MANIFESTING SELECTION</td>
<td>X</td>
<td>Select MANIFESTED</td>
</tr>
<tr>
<td>FMID</td>
<td>9AU</td>
<td></td>
</tr>
</tbody>
</table>

The DEPLOYMENT SUMMARY REPORT shows manifested and/or unmanifested requirements as well as scheduled and actual movement between specified dates for each carrier in LAD sequence. The report is useful in identifying scheduling shortfalls and allows for daily monitoring of scheduled requirements. It can be limited by several elements including, UIC, FMID, and ULN.

<Xmit>. The Spawn Batch Job screen (Figure 3.6) is displayed.

Enter S/F E8 AND <xmit> to view the final report, FORCE MODULE MOVEMENT SUMMARY REPORT.
The FORCE MODULE MOVEMENT SUMMARY REPORT (Figure 9.15) is a two-part report showing summary movement information for specified FMs in an OPLAN. By leaving all the data fields blank, all FMs for the plan are included in the report.

**Situation Update.** Due to increasing hostilities and critical resources, USMEDCOM requests advancement of arrival dates for the Armor Company (ULN 9AAJ) to the following:

- **RLD** C000
- **EAD** C000
- **RDD** C005
- **ALD** C000
- **LAD** C004

JCS approves the request and USMEDCOM uses S/F BL to adjust the dates. Now, you must manually schedule and manifest this requirement. A partial schedule is established.

**SUBSYSTEM/FUNCTION EE** adds (and deletes) TCC carrier records.

Enter S/F E or *E on the command line and <xmit> to receive the Add/Delte TCC Carrier (Part 1 of 2) screen.
Following the entries in Figure 9.16, first enter an A in the FUNCTION CODE, to add the record. Then enter the following:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARRIER NAME</td>
<td>T00001</td>
<td>A unique number for the mission. T + numeric characters.</td>
</tr>
<tr>
<td>TCC SOURCE MAC</td>
<td>MAC</td>
<td>MAC-controlled carrier</td>
</tr>
<tr>
<td>CARRIER TYPE/MDS</td>
<td>C141B</td>
<td></td>
</tr>
<tr>
<td>CONF CODE</td>
<td>A</td>
<td>Administratively loaded</td>
</tr>
<tr>
<td>PAX</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>STONS</td>
<td>24.5</td>
<td></td>
</tr>
<tr>
<td>MTONS</td>
<td></td>
<td>Pertains to surface carriers.</td>
</tr>
<tr>
<td>SCHEDULED ARRIVE</td>
<td>210125ZOC'T91</td>
<td></td>
</tr>
<tr>
<td>GEO CODE</td>
<td>CYWF</td>
<td>Campbell AAF, KY.</td>
</tr>
<tr>
<td>STOP CODE</td>
<td>0</td>
<td>Onload PAX and cargo.</td>
</tr>
<tr>
<td>SCHEDULED DEPART</td>
<td>210355ZOC'T91</td>
<td></td>
</tr>
</tbody>
</table>

Enter the remaining GEO, STOP, SCHEDULED DEPART and ARRIVE fields as per Table 9.1.
Table 9.1 TCC Carrier Schedule

Press <xmit> and the screen displays blank data fields with the message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

Enter S/F ET to review the carrier itinerary. Enter T00001 at CARRIER NAME/UNIQUE DESCRIPTION. Place an X at ITINERARY and Figure 9.3 is displayed with the scheduled arrival and departure times for carrier T00001.

Now that the required carrier is scheduled, you must manifest the personnel and cargo on the carrier.

Enter EQ in SUBSYSTEM and FUNCTION CODE or *EQ where permitted, <xmit>. The Manifest TCC Carrier/Organic Movement screen is displayed with R posted at FUNCTION CODE.

Review the record by entering T00001 in CARRIER NAME, CYWF in ONLOAD GEO, and JEAH in UNLOAD GEO. <xmit> and there will be a screen with the carrier information in the middle section of the screen. Now make the following entries as in Figure 9.17:
Data Field | Entry | Remarks
--- | --- | ---
A/C/D | A | Add option.
REQ TYPE | U | Identifies force record.
ULN/CIN/PIN | 9AAJ | ULN for Armor Company.
PAX | 0 | No passengers manifested.
S-BULK | 3.5 | STONs of bulk cargo manifested.
S-OVER | 16.5 | STONs of oversized cargo manifested.

There is no outsized cargo. Press <xmit> and you return to Figure 9.17 with blank data fields. If an overmanifest occurs, a warning message displays to alert you to that effect. You may then accept or reject the manifest. If rejected, you'll return to the previous screen (Figure 9.17) and using the C option, may change the data.

To review the manifest, enter Subsystem/Function ET, or *ET on the command line and <xmit>. Figure 9.2, with no entries selected, is displayed.

Enter the CARRIER NAME, T00001, place an X at MANIFEST, and <xmit>. The TCC Carrier/Organic Movement Manifest screen (Figure 9.18) is displayed, confirming the recent manifest entries.

| 262008FEB | OPLAN 911PC | TCC CARRIER/ORGANIC MOVEMENT MANIFEST |
| SM-T04 | NAME T00001 |
| ROUTING - GEO NAME FOR THIS LEG - PAX STONS MTONS |
| FROM ONLOAD CYWF CAMPBELL AAF TOTAL MANIFESTED 0 20.0 0 |
| TO UNLOAD JEAH JERBA/ZARZIS AND REMAINING 25 4.5 0 |
| UNL/CIN/PIN PAX S-BULK S-OVER S-OUT TOT STONS MTONS |
| 9AAJ 0 3.5 16.5 0.0 20.0 0 |

---

Figure 9.18 TCC Carrier/Organic Movement Manifest

**Briefing.** As USTRANSCOM CAT duty officer, you must brief the scheduling and manifesting status for ULN 9AAJ. S/F BE provides ULN schedule summary and schedule detail information.
Enter **BE** on the command line (<xmit>) and then enter **9AAJ** at ENTER ULN FOR SCHEDULE STATUS DISPLAY or use JSIT command US 9AAJ, <xmit>. The ULN Schedule Summary is displayed.

Enter **USD** on the command line, as in Figure 9.19, and <xmit> to review the schedule details.

The previous series of screens demonstrates how the system is tied together.

Add Intermediate Stop. USTRANSCOM directs MAC to insert a stop at Decimomannu, Italy to carry retrograde personnel and reparable equipment. Insert the stop into the current flight T00001 itinerary.

Enter S/F **EG** or **#EG**, where permitted, and <xmit>. The Insert Itinerary For TCC Carrier screen is displayed with **R** in the FUNCTION CODE block.
Enter **T00001** in CARRIER NAME to review the itinerary information. <Xmit>. The current itinerary is displayed.

To insert legs into the itinerary, enter **A** in FUNCTION CODE. Enter **X** in INSERT AFTER on the line with GEO Code JEAH. <Xmit>.

The screen redisplays with six blank lines between the JEAH stop and the stop after JEAH, GEO Code XBGX.

To insert the stop at Decimomannu, GEO code FDCZ, enter the following, as seen in Figure 9.20:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARRIVE SCHEDULED</td>
<td>212225ZOC91</td>
<td>30 minute flight time.</td>
</tr>
<tr>
<td>GEO CODE</td>
<td>FDCZ</td>
<td>Decimomannu, Italy.</td>
</tr>
<tr>
<td>STOP CODE</td>
<td>E</td>
<td>Enroute fuel stop.</td>
</tr>
<tr>
<td>DEPART SCHEDULED</td>
<td>220025ZOC91</td>
<td>Two hours ground time.</td>
</tr>
</tbody>
</table>

<Xmit>. After processing, the screen displays blank with message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

**TCC Itinerary Change.** The insertion of a stop at Decimomannu requires adjusting the arrival and departure times at Torrejon AB in Spain.

S/F EF permits the change of arrival and departure times. Enter S/F EF or *EF, where allowed, and <xmit>. The Change TCC Carrier screen is displayed with **R** at FUNCTION CODE.

Enter **T00001** in CARRIER NAME to first review the itinerary. <Xmit> and the itinerary displays. Note that the Deci stop is now included.
Enter C at FUNCTION CODE as well as making the following changes to complete the display as in Figure 9.21:

**Data Field** | **Entry** | **Remarks**
--- | --- | ---
ARRIVE SCHEDULED (XBGX) | 220245ZOC91 | Changes scheduled arrival DTG at Torrejon.
DEPART SCHEDULED (XBGX) | 220530ZOC91 | Changes scheduled departure DTG at Torrejon.

<Xmit>. The screen Change TCC Carrier (Part 2 of 2) is displayed. Enter A in FUNCTION CODE to enter a narrative description of itinerary changes. Enter the text as it appears in Figure 9.22. <Xmit> and the screen displays with the message, "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

26213202EB OPLAN 911PC CHANGE TCC CARRIER (PART 2 OF 2) SUBSYSTEM CODE [E] SM-F01B

YOU HAVE MADE CHANGES TO CARRIER T00001.
YOU MAY ADD TWO LINES OF INFO EXPLAINING THE CHANGE, OR YOU MAY XMIT TO BYPASS THIS SCREEN.
(THE COMPUTER WILL ENTER DATE/TIME OF CHANGE AND RETURN TO THE 'CHANGE TCC CARRIER' SCREEN.)

[XMIT TO RETURN TO 'CHANGE TCC CARRIER SCREEN']
Add TCC Itinerary. CINTRANS directs that flight T00001 now terminate at Dover AFB, DE. The new tasking is executed using S/F EI. This Subsystem/Function allows TCCs to add follow-on legs at the end of the present itinerary.

Enter S/F EI or *EI, where allowed, and <xmit>.

The Add New Itinerary to TCC Carrier screen appears with an R at FUNCTION CODE. It is prudent to first review the present itinerary. Enter T00001 in CARRIER NAME and <xmit>.

```
262211ZJEB  OPAN 911PC  ADD NEW ITINERARY TO TCC CARRIER SUBSYSTEM CODE [E] SM-101
A=ADD,R=REV,X=MENU,Z=EXIT JDS OR FUNCTION CODE [A]

ENTER CARRIER NAME AND XMIT, THEN ENTER 'A' IN FUNCTION CODE AND ADD NEW LINES OF ITINERARY AFTER THE LINE POSTED BELOW (ONLY LAST ITINERARY LINE SHOWN)
CARRIER NAME [T00001] [ALL INPUT DATE FORMATS ARE DDHHMMZMMYY]

ARRIVE SCHEDULED CODE CODE SCHEDULED ACTUAL
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ]

ENTER 'C' TO CONTINUE ADDING ITINERARY [ ] OR XMIT IF DONE
```

Figure 9.23 Add New Itinerary to TCC Carrier

The screen reappears with the schedule through XBGX filled in. To add the termination point, enter A in FUNCTION CODE and make the following entries as in Figure 9.23:

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARRIVE SCHEDULED</td>
<td>221430ZCCT91</td>
<td>9 hours flight time.</td>
</tr>
<tr>
<td>GEO CODE</td>
<td>FJXT</td>
<td>Dover AFB, DE.</td>
</tr>
<tr>
<td>STOP CODE</td>
<td>T</td>
<td>Mission terminates.</td>
</tr>
</tbody>
</table>

<xmit>. Screen SM-I01 displays blank with the message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

Clone Carrier. Additional equipment is ready to be moved to Jerba IAP. Since the movement characteristics are identical to mission T0001's, S/F EF is the appropriate Subsystem/Function to employ.

Enter S/F EF or *EF, where permitted, and <xmit>. Part 1 of the Change TCC Carrier screen appears with R at FUNCTION CODE.
To clone the new carrier, make the following entries as per Figure 9.24:

Enter C in FUNCTION CODE.

Enter T00002 in CARRIER NAME.

<xmit>.

The screen redisplays with R in FUNCTION CODE and the message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS" across the bottom of the screen.

Since the two aircraft cannot depart at the same time, use S/F EF to change the arrival and departure times for the new aircraft. T00002 will depart 30 minutes after the first carrier, T00001.

When cloning, the schedule copies but the manifest does not copy from source carrier to target carrier. You must perform this aspect separately.

Divert TCC Carrier. Loading problems experienced at Campbell force the onload location for carrier T00001 to Scott AFB, IL. The carrier record requires update.

Subsystem/Function Code EJ provides the means to divert a carrier. Only those with a stop code of O, U, B or A may be changed. The manifest will remain the same, although itinerary changes are possible.
Enter S/F EJ or *EJ on the command line and <xmit>. The Divert TCC Carrier (Part 1 of 2) screen displays with R at FUNCTION CODE.

Enter T00001 at CARRIER NAME and <xmit>. The same screen displays, this time including the itinerary data.

270946FEB OPLAN 911PC DIVERT TCC CARRIER (PART 1 OF 2) SUBSYSTEM CODE [E] SM-J01A C=CHG,R=REV,X=MENU,Z=EXIT JDS OR FUNCTION CODE [C]
DIVERSION APPLIES TO CHANGES TO GEOS WITH STOP CODES OF 'O', 'U', 'B', OR 'A'. ENTER NEW GEO OVER OLD. YOU MAY ALSO CHANGE TIMES, INTERMEDIATE GEO/STOP CODES.
CARRIER WILL REMAIN MANIFESTED.
CARRIER NAME (T00001)

[ALL INPUT DATE FORMATS ARE DDMMYYYY]

<table>
<thead>
<tr>
<th>ARRIVE</th>
<th>SCHEDULED</th>
<th>GEO</th>
<th>STOP</th>
<th>DEPART</th>
<th>SCHEDULED</th>
<th>ACTUAL</th>
<th>FEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

XMIT IF DONE PLEASE ENTER A VALID FUNCTION CODE

Figure 9.25 Divert TCC Carrier (Part 1 of 2)

Figure 9.25 illustrates the entries required:

C in FUNCTION CODE to allow the diversion change.

VDYD, the new onload GEO code, over the old CYWF.

<xmit>. The second page of the itinerary is displayed. You have the option of accepting the information and pressing <xmit> or entering a narrative explanation for the diversion. An explanation will provide a trace for future reference. Enter A in FUNCTION CODE and then the text as in Figure 9.26.

270946FEB OPLAN 911PC DIVERT TCC CARRIER (PART 2 OF 2) SUBSYSTEM CODE [E] SM-J01B A=ADD,X=MENU,Z=EXIT JDS OR FUNCTION CODE [A]

YOU HAVE DIVERTED CARRIER T00001.
YOU MAY ADD TWO LINES OF INFO EXPLAINING THE DIVERSION OR YOU MAY XMIT TO BYPASS THIS SCREEN.
(THE COMPUTER WILL ENTER DATE/TIME OF DIVERSION AND RETURN TO THE 'DIVERT TCC CARRIER' SCREEN.)

| LOADING PROBLEMS AT CAMPBELL AAF CHANGED ONLOAD TO SCOTT IL |

XMIT TO RETURN TO 'DIVERT TCC CARRIER SCREEN'

Figure 9.26 Divert TCC Carrier (Part 2 of 2)
**Report Actual Depart/Arrival Times.** Carrier T00001 has already departed VDYD and you are tasked to report the actual arrival and departure times.

Enter S/F ES or *ES on the command line, where permitted, and <xmit>. The Report Actual/Depart Time screen is displayed with R in FUNCTION CODE.

![Report Actual Depart/Arrival Time Screen](image)

<table>
<thead>
<tr>
<th>CARRIER NAME/UNIQUE DESCRIPTION</th>
<th>[T00001]</th>
<th>SOURCE [MAC]</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHEDULED ACTUAL CODE CODE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[210120Z0CT91]</td>
<td>210125Z0CT91</td>
<td>VDYD O 210352Z0CT91</td>
</tr>
<tr>
<td>[211025Z0CT91]</td>
<td>211105Z0CT91</td>
<td>JEAH U 211325Z0CT91</td>
</tr>
<tr>
<td>[212125Z0CT91]</td>
<td>212205Z0CT91</td>
<td>XBGX E 212435Z0CT91</td>
</tr>
<tr>
<td>[211925Z0CT91]</td>
<td>211105Z0CT91</td>
<td>JEAH U 211325Z0CT91</td>
</tr>
<tr>
<td>[211225Z0CT91]</td>
<td>212205Z0CT91</td>
<td>XBGX E 212435Z0CT91</td>
</tr>
<tr>
<td>[211430Z0CT91]</td>
<td>211225Z0CT91</td>
<td>XBGX E 212435Z0CT91</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enter 'C' to continue reporting or XMIT if done. Please enter a valid function code.

**Figure 9.27 Report Actual Depart/Arrival Time**

Enter T00001 at CARRIER NAME, <xmit>, and the screen displays with the scheduled itinerary.

To report actual times, enter the following data, as seen in Figure 9.27:

- **A** at FUNCTION CODE to select the add option.
- **210120Z0CT91** at ARRIVE/ACTUAL (VDYD) to reflect the flight's early arrival.
- **210400Z0CT91** at DEPART/ACTUAL (VDYD) to reflect the flight's late departure.

<xmit> and the screen redisplays with the message "TRANSACTION QUEUED, SYSTEM LOAD MAY CAUSE DELAYS".

You have scheduled and manifested air carriers. Similar operations will perform the same for land and sea carriers.

The next section in the manual addresses unit information found in Subsystem C.
X. UNIT INFORMATION SUBSYSTEM

General Situation. You are the FORSCOM Operations Center Officer and as such, must verify the unit readiness of Company A, 10 Armor Battalion, 1st CAV Division. Review the SORTS file in the Unit Information Subsystem of JOPES to ascertain unit readiness data.

Return to the JOPES Master Menu, enter C in Subsystem Code and <xmit>. You may also simply enter C in SUBSYSTEM CODE or *C on the command line and <xmit>, if these options are available to you.

The resulting screen, the Unit Information Subsystem Menu, is presented in Figure 10.1.

![Figure 10.1 Unit Information Subsystem Menu](image)

The UNIT INFORMATION functions permit you to review and analyze selected SORTS data, unit tasking and deployment status. The menu choices are as follows:

<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review SORTS registered unit identification data and readiness status. Review or change non-SORTS registered unit data.</td>
</tr>
<tr>
<td>2</td>
<td>Review unit information and readiness status in narrative displays.</td>
</tr>
<tr>
<td>3</td>
<td>Review a unit's command relationships and normal peacetime task organization.</td>
</tr>
</tbody>
</table>

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4. Review the deployment status for up to 30 UICs and their OPLAN subordinates.

5. Review the tasking of a single UIC in a specific OPLAN.

6. Produce a report of unit tasking data available.

7. Produce a report of all multiple-tasked UICs.

First review SORTS data by entering S/F C1 or *C1 on the command line and <xmit>. Your screen should be entitled "Update/Review Unit Information".

First review SORTS data by entering S/F C1 or *C1 on the command line and <xmit>. Your screen should be entitled "Update/Review Unit Information".

![Figure 10.2 Update/Review Unit Information](image-url)

To review Armor Company unit information, enter R in FUNCTION CODE and WHPNAA in ENTER UIC OF UNIT. <Xmit>. The screen now displays the associated data, as in Figure 10.2. We can only review the data for a SORTS unit. In JOPES, this would be a classified screen with the SORTS data filled.

The SORTS abbreviations are:

- REASN - Reason
- PRRAT - Personnel Readiness Rating
- PRRES - Personnel Readiness Reason
- ERRAT - Equipment Readiness Rating
- ERRES - Equipment Readiness Reason
- TRRAT - Training Readiness Rating
- TRRES - Training Readiness Reason
- ESRAT - Equipment Supply Rating
- ESRES - Equipment Supply Reason
Now enter 2 in FUNCTION CODE to display unit information in clear text format. <Xmit>. Display Unit Information Data appears on the screen.

**Figure 10.3 Display Unit Information**

Enter WHPNA0 in ENTER UIC OF UNIT, as shown in Figure 10.3. <Xmit>. Figure 10.4 is a replica of the resulting display in a more readable format than that of Figure 10.2.

**Figure 10.4 Display Unit Identification Data**

<Xmit> to receive the Display Unit Readiness Data screen.
Figure 10.5 Display Unit Readiness Data

The display, Figure 10.5, summarizes the unit's readiness overall as well as in terms of personnel, equipment, training, and supply.

It appears that UIC WHPNA0 is in top readiness status. Before issuing a tasking order, you need to check the unit's normal peacetime task organization and deployment status.

Enter S/F C3 or *C3 on the command line and <xmit>. The resulting screen is Display Unit Subordinate Information.

Figure 10.6 Display Unit Subordinate Information

The Display Unit Subordinate Information inputs are limited for the UIC in JOPESCAI. Use the HELP key for further information.

Make the following entries as seen in Figure 10.6:

WHPXAA at ENTER UIC OF UNIT.
B at ENTER OPTION.
A at ENTER OUTPUT OPTION.

<xmit>. Unit Subordinate Information is displayed in Figure 10.7.

Further unit information is available in S/F C4. To check the unit deployment status, enter *C4 on the command line and <xmit>.

Figure 10.8 provides several options with respect to obtaining information on Unit Deployment Status.

Make the following entries:

A at ENTER REPORT TYPE OPTION CODE to receive the information quickly in a timesharing mode.

WHPNA9 at ENTER A UIC to select the Armor Company.

242359Z0CT91 at AS-OF-DATE to select C003.
In Figure 10.9 (and on the screen), you see the first part of a two part report. To view Part 2, enter DET on the command line and <xmit>.

**Review OPLAN Tasking.** An Operations Officer requests tasking information on one of the Seal Teams in OPLAN 911PC. Use S/F C5 or *C5 on the command line to access this data. <xmit>. The display is entitled "Display Unit Tasking Data".

Following the sample screen in Figure 10.10, enter NO9484 at ENTER UIC OF UNIT and <xmit> to receive the Unit Tasking Data screen.

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The Seal Team is tasked as a single shipment with a latest arrival date of C-Day plus 30. Figure 10.11 affirms this statement.

The two remaining functions in the Unit Information Subsystem, C6 and C7, produce reports to review unit tasking data. You can view the input screens by entering S/F C6 and S/F C7 or *C6 and *C7 on the command line. They will both produce the Spawn Batch Job screen (Figure 3.6).

You have reviewed unit tasking and now can turn to deployment tracking and status in the next section of the manual.
XI. DEPLOYMENT TRACKING AND STATUS

General Situation. Planning functions continue to support the Tunisian request for U.S. military assistance in northern Africa. As troops deploy, it is necessary to track their deployment status.

A combination of subsystems/functions support this concept of deployment tracking and status. S/Fs C4, D8, and E8 provide the means to monitor unit deployment status. S/Fs C4 and D8 provide visual displays, reports and graphs. Briefly, their capabilities are:

- S/F C4: Review deployment status for up to 30 UICs and their OPLAN subordinates.
- S/F D8: Review the deployment status of up to 30 FMIDs in an OPLAN.
- S/F E8: Produces a two-part report displaying summary movement information for specified FMs in an OPLAN.

Starting with the Subsystem/Function C4, we’ll review these functions in more depth. Enter S/F C4 or C4 on the command line and <xmit>.

The Display Unit Deployment Status For OPLAN 911PC screen is displayed. This screen was first viewed in the previous section of the manual (Figure 10.8).

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>REPORT TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (TSS)</td>
<td>UIC SCHEDULE ROLLUP</td>
</tr>
<tr>
<td>B (BATCH)</td>
<td>UIC SCHEDULE ROLLUP</td>
</tr>
<tr>
<td>c (BATCH)</td>
<td>OPLAN SCHEDULE ROLLUP</td>
</tr>
<tr>
<td>d (BATCH)</td>
<td>ULN SCHEDULE DETAIL</td>
</tr>
<tr>
<td>e (BATCH)</td>
<td>REPORT OPTIONS B, C AND D</td>
</tr>
</tbody>
</table>

Figure 11.1 Display Unit Deployment Status

Timesharing (TSS) is the only option in Figure 11.1 which will produce a report and graphical display on-line. The other
options, all of a batch nature, will produce the "Spawn Batch Job" screen (Figure 3.6).

Enter A at ENTER REPORT TYPE OPTION CODE.

This time, leave the remainder of the screen blank, allowing the defaults to be processed.

Press <xmit> and the resulting screen, UIC Schedule Rollup, can be examined.

<table>
<thead>
<tr>
<th>1919402FEB</th>
<th>UI-401</th>
<th>OPLAN 911PC</th>
<th>UIC FFD930</th>
<th>AS-OF-DATE 1919402FEB</th>
<th>PAGE 1 OF 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT</td>
<td>----ENROUTE----</td>
<td>----ARRIVED----</td>
<td>----ENROUTE----</td>
<td>----ARRIVED----</td>
<td></td>
</tr>
<tr>
<td>ORIGIN</td>
<td>TO INT</td>
<td>AT INT</td>
<td>TO POE</td>
<td>AT POE</td>
<td></td>
</tr>
<tr>
<td>PAX</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>STONE</td>
<td>1183</td>
<td>0.0</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>669</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANIFESTED TO POE</td>
<td>TO INT</td>
<td>AT INT</td>
<td>TO POE</td>
<td>AT POE</td>
<td>383 100%</td>
</tr>
<tr>
<td>PAX</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>STONE</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANIFESTED TO POD</td>
<td>TO INT</td>
<td>TO INT</td>
<td>TO DEST</td>
<td>AT DEST</td>
<td></td>
</tr>
<tr>
<td>PAX</td>
<td>359</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>STONE</td>
<td>1224</td>
<td>0.0</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>697</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANIFESTED TO POD</td>
<td>TO INT</td>
<td>TO INT</td>
<td>TO DEST</td>
<td>AT DEST</td>
<td>359 100%</td>
</tr>
<tr>
<td>PAX</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>STONE</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

ENTER 'SUM', 'DET', FP, LP, NP, PP, PAGE 999999, SPACE XMIT, JSIT COMMAND OR "SF"

**Figure 11.2 UIC Schedule Rollup**

The Schedule Rollup of UIC FFD930 from OPLAN 911PC is displayed in Figure 11.2. As you can see, 100% of the passengers and 51% of the cargo has arrived at the POD.

To view PART 2 of the display, enter DET on the command line and <xmit>. Figure 11.3 is displayed. This part presents individual requirement details for the unit specified.

<table>
<thead>
<tr>
<th>1919442FEB</th>
<th>UI-405</th>
<th>OPLAN 911PC</th>
<th>UIC FFD930</th>
<th>AS-OF-DATE 191942FEB</th>
<th>PAGE 1 OF 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT</td>
<td>----ENROUTE----</td>
<td>----ARRIVED----</td>
<td>----ENROUTE----</td>
<td>----ARRIVED----</td>
<td></td>
</tr>
<tr>
<td>ORIGIN</td>
<td>TO INT</td>
<td>AT INT</td>
<td>TO POE</td>
<td>AT POE</td>
<td></td>
</tr>
<tr>
<td>PAX</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>STONE</td>
<td>1183</td>
<td>0.0</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>669</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANIFESTED TO POE</td>
<td>TO INT</td>
<td>AT INT</td>
<td>TO POE</td>
<td>AT POE</td>
<td>359 100%</td>
</tr>
<tr>
<td>PAX</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>STONE</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANIFESTED TO POD</td>
<td>TO INT</td>
<td>TO INT</td>
<td>TO DEST</td>
<td>AT DEST</td>
<td></td>
</tr>
<tr>
<td>PAX</td>
<td>359</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>STONE</td>
<td>1224</td>
<td>0.0</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>697</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANIFESTED TO POD</td>
<td>TO INT</td>
<td>TO INT</td>
<td>TO DEST</td>
<td>AT DEST</td>
<td>359 100%</td>
</tr>
<tr>
<td>PAX</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>STONE</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

ENTER 'GEO XXXX', 'RET', FP, LP, NP, PP, PAGE 999999, SPACE XMIT, JSIT COMMAND OR "SF"

**Figure 11.3 UIC Schedule Rollup (Part 2)**
Note that MANIFESTED AT POD, in Figure 11.3, is identified with a GEO code, FLWJ, which is Jerba.

Enter *C4 on the command line to return to that S/F screen. Now, to try another selection on the menu, enter B at ENTER REPORT TYPE OPTION CODE. Enter X at ENTER 'X' TO ENTER UP TO 30 UICS. <Xmit>.

The Unit Deployment Status Selection screen is displayed.

The Unit Deployment Status Selection allows you to enter up to 30 UICs.

Enter the following UICs as seen in Figure 11.4: WG60AA, WH23C0, M20160, WABSAA, and WHPNA0. <Xmit>.

The Spawn Batch Job screen (Figure 3.6) is displayed.

Returning to screen UI-401, another option listed is ENTER 'X' TO INCLUDE ALL OPCON SUBORDINATES OF SPECIFIED UIC. This option is not available in JOPESCAI.

Another option that is available through Subsystem/Function C4 is generating graphic data representations of the UIC Schedule Rollup data.

You should have the Figure 11.1 screen (UI-401) before you. If not, enter S/F C4 or *C4 on the command line and <Xmit>. Make the following entries in order to generate the graphs.

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Entry</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTER REPORT TYPE OPTION CODE</td>
<td>A</td>
<td>Selects UIC Schedule Rollup.</td>
</tr>
</tbody>
</table>
ENTER A UIC M20160 UIC of 11 MEU.

ENTER 'X' FOR GRAPHIC REPRESENTATION X Selects graphic representation.

GRAPH CLASSIFICATION U Unclassified.

<Xmit>. A bar graph displays STONs for UIC M20160 at various locations. The Y-axis represents measurement in total STONs. Along the X-axis are these categories: REQUIRED, MANID (Manifested), AT ORG (at origin), ENROUTE TO POE, AT POE, ENROUTE TO POD, AT POD. Press <xmit> again to receive the second part, illustrating passenger (PAX) status.

Force Module Deployment Status. Subsystem/Function D8 is the parallel system to C4 for FMs. The screens are nearly identical to those just viewed. Enter S/F D8 or *D8, where permitted, and <xmit>. The Force Module Deployment Status screen is the main menu for this section.

To obtain the deployment status of FMID 9AU, as in Figure 11.5, enter the following:

A in ENTER REPORT TYPE OPTION CODE

9AU in ENTER AN FMID

X in EXCLUDE CINS AND PINS

232359ZOC79 in ENTER AS-OF-DATE

<Xmit>. Figure 11.6 is displayed, the Force Module Schedule Rollup For ULN.
### Figure 11.6 Force Module Schedule Rollup For ULN

The display in Figure 11.6 is for the ULN portion of the OPLAN. Similar reports are also available for CINs and PINs.

The other options available in Figure 11.5 require input similar to that of the Subsystem/Function C4, including graphical displays.

**Force Module Movement Summary Report.** The final Subsystem/Function that we want to examine in this section is S/F E8. Enter E8 in SUBSYSTEM and FUNCTION CODE or *E8, where permitted, and <xmit>. The FM Movement Summary Report is displayed.

### Figure 11.7 Force Module Movement Summary Report

The options for this report in Figure 11.7 include selecting a summary or the full report, and selecting all FMs in the OPLAN or individual FMs or ranges of FMIDs.

---

<table>
<thead>
<tr>
<th>AT</th>
<th>----ENROUTE----</th>
<th>----ARRIVED----</th>
<th>----ENROUTE----</th>
<th>----ARRIVED----</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIGIN</td>
<td>PAX</td>
<td>4015</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>STONE</td>
<td>25583</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>MTONS</td>
<td>3969</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>MANIFESTED TO POE</td>
<td>PAX</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>STONE</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MTONS</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MANIFESTED TO POD</td>
<td>PAX</td>
<td>969</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>STONE</td>
<td>2800</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>MTONS</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Enter 'DET'. PP, LP, NP, PP, PAGE 999999, SPACE XMIT, JSIT COMMAND OR *SF
After pressing <xmit> you will receive the Spawn Batch Job screen (Figure 3.6).

**Tracking Deployment Status.** Subsystem/Function F6 provides another means of tracking deployment status. JOPESCAI leads you through this function in a manner similar to that of the PLAN BUILD section. You are strongly urged to read the accompanying TUTOR and HELP screens as each is addressed.

Retrieval of data in this subsystem/function is specified by the user. This capability is unique in that allows the user to build a retrieval containing any data element within the subfiles utilized in F6. The next section of the manual addresses retrieval capabilities in depth.
XII. RETRIEVAL SUBSYSTEM

Subsystem F offers options to determine a retrieval type and format which can be used to display the required OPLAN information. Options E through J are standard JOPES reference files. Enter S/F F or *F and <xmit> to view the Retrieval Subsystem Menu (Figure 12.1).

<table>
<thead>
<tr>
<th>FUNCTION CODE</th>
<th>FUNCTION DESCRIPTION</th>
<th>FUNCTION CODE</th>
<th>FUNCTION DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GENERAL JDS RETRIEVAL (JSIT)</td>
<td>E</td>
<td>GEOFILE</td>
</tr>
<tr>
<td>2</td>
<td>PREDEFINED TERMINAL DISPLAYS</td>
<td>F</td>
<td>TUCHA</td>
</tr>
<tr>
<td>3</td>
<td>PREDEFINED PRINTED REPORTS</td>
<td>G</td>
<td>TUCHET</td>
</tr>
<tr>
<td>4</td>
<td>USER SPECIFIED RETRIEVALS (DISPLAYS, REPORTS)</td>
<td>H</td>
<td>CHSTR/ASSETS</td>
</tr>
<tr>
<td>6</td>
<td>RETRIEVAL/GRAPHIC BETA SYSTEM</td>
<td>I</td>
<td>PORTS</td>
</tr>
<tr>
<td>8</td>
<td>JOINT PLANNING AND EXECUTION GRAPHICS (JPEG)</td>
<td>J</td>
<td>APORTS</td>
</tr>
</tbody>
</table>

(NOTE - JSIT MAY BE ENTERED FROM THIS SCREEN)

Figure 12.1 Retrieval Subsystem Menu

A summary of the subsystem functions is as follows:

<table>
<thead>
<tr>
<th>FUNCTION CODE</th>
<th>DESCRIPTION</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General JDS retrieval</td>
<td>Outlines JSIT commands available.</td>
</tr>
<tr>
<td>2</td>
<td>Predefined terminal displays</td>
<td>Predefined terminal displays available.</td>
</tr>
<tr>
<td>3</td>
<td>Predefined printed reports</td>
<td>Predefined printed reports available.</td>
</tr>
<tr>
<td>4</td>
<td>User specified retrievals</td>
<td>Create own ad hoc reports to view on terminal or printer.</td>
</tr>
<tr>
<td>6</td>
<td>Retrieval/graphic beta system</td>
<td>User-specified retrievals and graphic displays.</td>
</tr>
<tr>
<td>8</td>
<td>Joint Planning and Execution Graphics</td>
<td>Use predefined products to analyze the plan and build briefing aids. You can also create your own ad hoc graphics and reports.</td>
</tr>
</tbody>
</table>
Beginning with the reference files, we'll review each of these.

**GEOFILE FUNCTION.** Enter E in FUNCTION CODE and <xmit>.

GEOFILE - Data Selection is the screen displayed.

```
2313472FEB  GEOFILE - DATA SELECTION  SUBSYSTEM CODE [F]
            RV-ED1

ENTER X FOR SELECTION CRITERIA

  1) GEO CODE
  2) COUNTRY/STATE CODE
  3) LOGISTICS PLANNING AND REPORTING CODE
  4) INSTALLATION TYPE CODE
  5) INTERNATIONAL CIVIL AVIATION ORGANIZATION CODE (ICAO)
  6) CIRCLE/WINDOW SEARCH
```

*Figure 12.2* GEOFILE - Data Selection

From selections on this menu (Figure 12.2), you may review information concerning a particular geographic location. If the GEO code is unknown, a search may be conducted using any of the other options. The selection may also serve to limit the report.

The GEO code FTZH, El Borma, is known to us. Enter X at GEO CODE and <xmit>. The next screen requires the GEO code; up to 28 codes may be entered. Enter FTZH and <xmit>.

GEOFILE - Output Selection is displayed.

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Figure 12.3 GEOFILE - Output Selection

The screen first relates the number of GEOs retrieved based on the data selected. In our case this is just one, since we only requested input on one code.

To review the report, as in Figure 12.3, enter B at DISPLAY OUTPUT REPORT and <xmit>. The GEOFILE Display appears on the screen.

Figure 12.4 GEOFILE Display

This is the first of a two-part display. The column headings for Part 1 are as follows:

<table>
<thead>
<tr>
<th>Heading</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO</td>
<td>GEO CODE. List of codes available in JOPESCAI are available via the F4 CODES key. For example, FTZH for Borma.</td>
</tr>
<tr>
<td>PRIME GEO</td>
<td>Primary geographic location in the area. More than one geolocation may exist for the same location name. The difference is apparent in the type of installation code. Example: BSRK and BSRL for Bizerte.</td>
</tr>
<tr>
<td>Heading</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GEO COORDINATES</td>
<td>Latitude and longitude coordinates.</td>
</tr>
<tr>
<td>GEO NAME</td>
<td>The name corresponding to the GEO Code.</td>
</tr>
<tr>
<td>COUNTRY NAME</td>
<td>The country corresponding to the geographic location. TUNSA is Tunisia.</td>
</tr>
<tr>
<td>CS CD</td>
<td>Country/State Code</td>
</tr>
<tr>
<td>LPR CD</td>
<td>Logistics Planning and Reporting Code.</td>
</tr>
<tr>
<td>INS TYPE</td>
<td>Installation Type. APT = Airport.</td>
</tr>
<tr>
<td>ICAO CODE</td>
<td>International Aviation Civil Organization Code.</td>
</tr>
<tr>
<td>MIL RGN</td>
<td>Military Region.</td>
</tr>
</tbody>
</table>

To view the second part of the display, enter **PART 2** on the command line as in Figure 12.4 and `<xmit>`. Additional geographic information is displayed, the column headings are explained below:

<table>
<thead>
<tr>
<th>Heading</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROVINCE NAME</td>
<td>The name of a political subdivision or province.</td>
</tr>
<tr>
<td>PRV CODE</td>
<td>The province location code of a political subdivision of another country or counties of the United Sates.</td>
</tr>
<tr>
<td>ST CODE</td>
<td>State code.</td>
</tr>
<tr>
<td>CITY CODE</td>
<td>City code.</td>
</tr>
<tr>
<td>CNTY CODE</td>
<td>Country code.</td>
</tr>
<tr>
<td>RGOV</td>
<td>Regional government code.</td>
</tr>
<tr>
<td>ARMY CODE</td>
<td>Service-specific code.</td>
</tr>
<tr>
<td>NAVY CODE</td>
<td>Service-specific code.</td>
</tr>
<tr>
<td>RUIC</td>
<td>Reserve Unit Identification Code.</td>
</tr>
<tr>
<td>RS</td>
<td>Record status. S - geolocation is suspect; D - geolocation is deleted.</td>
</tr>
<tr>
<td>CIR DIST</td>
<td>Circle Distance. Radial distance from a specified GEO.</td>
</tr>
</tbody>
</table>
Enter **END** on the command line and <xmit> to return to the GEOFILE Output Selection Menu (Figure 12.3).

Select **A** to RETURN TO SELECTION CRITERIA. <xmit>. **Blank out the X** at GEO CODE and this time select COUNTRY/STATE CODE by placing an **X** next to it. <xmit>. GEO File - Selection by Country/State Codes appears and requires an entry.

![Figure 12.5 GEO File - Selection by Country/State Codes](image)

Enter **TS** in order to obtain the database listing of the geographic locations in Tunisia. As you can see in Figure 12.5, up to 54 locations may be entered. <xmit>.

Figure 12.3 displays again, this time with a statement that 35 GEOs were retrieved. Enter option **B** and <xmit>. The result is displayed in Figure 12.6 (the GEOFILE Display again).

![Figure 12.6 GEOFILE Display](image)

The GEOFILE Display in Figure 12.6 shows the first page of a four page display and the first of two parts. Use a paging command to view other pages and parts.
Enter END on the command line and <xmit> to return to the GEOFILE - Output Selection Menu. Again, select A to start the selection process. <Xmit> and Geofile - Data Selection (Figure 12.2) appears. Enter X at LOGISTICS PLANNING AND REPORTING CODE and <xmit>.

A screen is displayed requesting a LOGISTICS PLANNING AND REPORTING CODE. From Figure 12.6 we know that the code for the Tunisian area is 4S. Enter 4S and <xmit>.

Figure 12.3 is displayed, this time indicating that 36 locations have been retrieved. Enter B to DISPLAY OUTPUT REPORT and <xmit>. The display is identical to that of 12.6 with one exception. The first entry identifies the Mediterranean Sea as a location in the 4S region for logistics and planning purposes.

Enter END on the command line, <xmit> and progress to the next data selection choice on the menu. Choose INSTALLATION TYPE CODE (which includes blanking any Xs which indicate previous choices). <Xmit>.

The screen display contains a request for INSTALLATION TYPE CODES. Up to 18 codes may be entered. We have seen two types thus far, APT and SEA. To view some new information, enter AIN (Army Installation), MAP (Military Airport) and IAP (International Airport). Remember that the information in JOPESCAI is not necessarily complete, due to database limitations. Press <xmit>.

Figure 12.3 is displayed with a note that 48 locations have been retrieved. Selection option B to DISPLAY OUTPUT REPORT. <Xmit>.

The new multi-page GEOFILE display is shown in Figure 12.7.

Figure 12.7 GEOFILE Display
The display is familiar (see Figure 12.6) although the data itself has changed. Notice that we are not limited to geographic locations in Tunisia. If that was desired, at the Data Selection menu, it would be appropriate to place an X at multiple criteria.

Enter END on the command line and <xmit>. Return to Selection Criteria and now choose INTERNATIONAL CIVIL AVIATION ORGANIZATION CODE (ICAO). Press <xmit>.

The displays requests an ICAO code, up to 28 codes may be chosen. Enter DTTJ and <xmit>. Figure 12.3 is displayed indicating that two GEOs were retrieved. Enter Option B and press <xmit>. The GEOFILE Display appears on the screen.

```
242152ZFE  GEOFILE DISPLAY
RV-E06A
PART 1 OF 2
PAGE 1 OF 1

<table>
<thead>
<tr>
<th>PRIME</th>
<th>GEO GEO COORDINATES</th>
<th>GEO NAME</th>
<th>ENTRY CE</th>
<th>LPR</th>
<th>INS</th>
<th>ICAO</th>
<th>MIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLWJ</td>
<td>FLWJ 335235N104645E</td>
<td>JERBA/ ZARIS</td>
<td>... ...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>JEAH</td>
<td>JEAH 335235N104645E</td>
<td>JERBA/ ZARIS</td>
<td>... ...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

ENTER FN, NP/N, PP/N, LP/N, PAGE 1 OF 1, PART 2, END
```

Figure 12.8 GEOFILE Display

After reviewing Figure 12.8, navigate back to the GEOFILE - Data Selection menu and select the last entry, CIRCLE/WINDOW SEARCH. GEOFILE - Circle/Window Search Selection is the new display. The Window Search option is not available in JOPESCAI.

```
242152ZFE  GEOFILE - CIRCLE/WINDOW SEARCH SELECTION SUBSYSTEM CODE [F]
RV-E08
X-MENU, Z-EXIT, FUNCTION CODE [E]

CIRCLE SEARCH
ENTER CENTER POINT GEO CODE OR GEO COORD (LAT/LONG)
[FTZH] OR [ ] 1300 | NM

WINDOW SEARCH
ENTER UPPER LEFT POINT GEO CODE OR GEO COORD (LAT/LONG)
[ ] OR [ ]
ENTER LOWER RIGHT POINT GEO CODE OR GEO COORD (LAT/LONG)
[ ] OR [ ]

THE WINDOW SEARCH IS NOT YET IMPLEMENTED IN JOPESCAI
```

Figure 12.9 GEOFILE - Circle/Window Search Selection

Under CIRCLE SEARCH, enter FTZH at GEO CODE and 300 at NM for the search radius, as in Figure 12.9. <Xmit>. All geographic
locations within a 300NM radius of El Borma, Tunisia will be retrieved. 23 GEOs were retrieved according to the Output Selection screen. Enter B and <xmit> to view the data.

**TUCHA FILE FUNCTION.** The next function to examine more closely is S/F FF, the TUCHA (Type Unit Characteristics) file. JOPESCAI has a limited database but the fundamental concept remains. Enter S/F FF, or *FF, where permitted, and <xmit>. The TUCHA Retrieval screen is displayed.

The TUCHA retrieval screen allows you the capability to retrieve TUCHA data based on one or more criteria. The JOPESCAI database is limited to specific UTCs. Press the F4 (CODES) key, select UTC, and page down to the list beginning on page 5 and ending on page 7 to view the available UTCs. Then EXIT to return to the menu.

Enter an X at SPECIFIC UTC(S), as in Figure 12.10 and <xmit>. The display is entitled "TUCHA - Selection by UTC".
Up to 25 UTCs may be entered on the TUCHA selection screen. If an invalid code is entered, an error message will display.

Enter three UTCs as in Figure 12.11: OAFHN, 2EBCD, 5CVCA. <Xmit>. The display is of TUCHAFILE - Output Selection.

![Figure 12.12 TUCHAFILE - Output Selection](image)

In TUCHAFILE - Output Selection, the number of unit types retrieved based on the data selection criteria is stated. The number in Figure 12.12, 3, is no surprise as we had selected three valid UTCs.

Three options are offered, and like Figure 12.12, select B by entering it in the option box. The new display is of TUCHA Summary Data.

![Figure 12.13 TUCHA Retrieval - Display of TUCHA Summary Data](image)

The TUCHA Summary Data display includes the UTC, ULC, movement specification status, unit type name, service, deployment status and the number of cargo categories. Review the data in Figure 12.13 and then make the following entry on the command line: EXPAND 2EBCD to obtain further information on that particular UTC. <Xmit>. After processing, the screen is a display of TUCHA Retrieval - Detail Display by UTC.

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The UTC Detail Display breaks the UTC down by cargo category codes. Some of the abbreviations on the screen (Figure 12.14) may be unfamiliar and are not in the online glossary:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>APER</td>
<td>Authorized personnel.</td>
</tr>
<tr>
<td>CCC(RPT)</td>
<td>Reported number of cargo category codes.</td>
</tr>
<tr>
<td>CCC(ACT)</td>
<td>Actual number of cargo category codes.</td>
</tr>
<tr>
<td>DET REQ</td>
<td>Number of cargo category details the TUCHA contains for this unit.</td>
</tr>
<tr>
<td>DET ACT</td>
<td>Actual number of cargo category records present with this UTC.</td>
</tr>
<tr>
<td>HL Code</td>
<td>Heavy Lift Code.</td>
</tr>
</tbody>
</table>

Further details are available by CCC. Enter **EXPAND A1D** on the command line, as directed, to receive the detail display of Cargo Category Code A1D. <Xmit>. 
The Cargo Characteristics display reveals the items in A1D, listing them by record number. Attendant data includes dimensions, number of pieces, weight and square footage. Figure 12.15 provides data on two records for UTC 2EBCD, CCC A1D.

To exit this screen, you may enter END on the command line, <xmit>, and return to Figure 12.14, or enter MENU on the command line, <xmit>, and return to Figure 12.12, TUCHA Output Selection.

By entering MENU, you will have an opportunity to try some of the other options available on the Output Selection screen. The ultimate displays will be similar to those you have just viewed.

TUDET FILE FUNCTION. The Type Unit Equipment Detail file can be accessed through S/F FG. Enter S/F FG or *FG, where permitted, and <xmit>. The TUDET Retrieval screen is displayed.

The TUDET Retrieval screen offers two options, retrieval by Equipment Identification Code (EIC) or by Cargo Category Code (CCC). First, select EIC by entering A at ENTER SELECTION CRITERION (Figure 12.16). <Xmit>. The resulting screen is TUDET - Selection by EIC.
You may obtain a list of EIC's available in JOPESCAI by pressing the F4 CODES key. A random selection of one code from each of the four pages produced the entries in Figure 12.17. Enter those or others that you may desire to view. The system accepts up to 36 entries. Enter the codes and press <xmit>. After processing, the TUDET - Output Selection screen is displayed.

The first statement you will likely read on the TUDET Output Selection screen is the fact that four equipment types were retrieved. To obtain a list of these, select option B, DISPLAY OUTPUT REPORT (Figure 12.18). Enter B at ENTER ONE OPTION and <xmit>.
Figure 12.19 Display of TUDET Data

TUDET data consists of a brief description of the item, model number if applicable, service, cargo category code, dimensions and weights. Four examples are provided in Figure 12.19. After reviewing, enter END on the command line and <xmit>.

Returning to the Output Selection screen, select A, RETURN TO SELECTION CRITERIA, and <xmit>.

For your TUDET retrieval this time, select B, BY CARGO CATEGORY CODE, and <xmit>. This results in the the display of TUDET - Cargo Category Codes.

Figure 12.20 TUDET - Cargo Category Codes

The TUDET - Cargo Category Codes display provides a list of each potential character. The * is a wild card choice that results in selecting all possibilities for that character position. Up to 10 CCCs may be selected. To obtain a CCC listing, enter A*D as in the example in Figure 12.20. <Xmit>.

The TUDET - Output Selection screen is displayed, citing 27 equipment types retrieved. Enter B, DISPLAY OUTPUT REPORT, and <xmit>. The Display of TUDET Data appears on the screen.
Figure 12.21 Display of TUDET Data

In Figure 12.21, the first of the three page display of TUDET Data, the cargo category code is A2D. Using a paging command, view the remaining pages. You will notice that A1D and A3D are the other CCCs pulled from the database, fulfilling the A*D selection.

To move on, enter END on the command line and <xmit>.

You return to the TUDET Output Selection. Since both options have been performed, enter H at FUNCTION CODE and <xmit>.

The Characteristics and Assets menu is accessed with two options, Aircraft and Ships.

Figure 12.22 Characteristics and Assets Retrieval

AIRCRAFT. The function FH displays available airlift or sealift assets and their characteristics. As in Figure 12.22, enter A at ENTER SELECTION CRITERIA. <xmit>.
The Characteristics and Assets Retrieval display allows you to limit data to a specific type of carrier or to all assets with a specified range or cargo capacity.

Make the following entry as in Figure 12.23:

X at AIRCRAFT TYPE.

<Xmit> to advance to the next screen.

Selection criteria by aircraft type is presented in Figure 12.24. JOPESCAI restricts retrieval to three aircraft. Enter all three by placing an X in the box next to: C-5, C141B and KC-10. <Xmit>.

The CHSTR and Assets - Output Selection screen identifies three retrievals. Enter B at DISPLAY OUTPUT REPORT to view the data. <Xmit>. Specific Aircraft Selection is displayed.
The information provided for each type of aircraft includes cubic capacity, critical range and passengers capacity. For example, the display in Figure 12.25 shows that the C141B has a cubic capacity of 7024 feet, a critical range of 3500 miles and 153 passengers.

To obtain further information, exercise the option presented at the bottom of the screen by entering EXPAND C141B and pressing <xmit>. The Aircraft Load Characteristics screen is displayed.

Review the information as in Figure 12.26 on aircraft load characteristics. Several options are presented at the bottom of the screen and the four principal ones are:

**Command/Entry**  
**Description**

EXPAND UTE  
Provides utilization rate data.

EXPAND ASSET  
Provides data on assets.
Returns user to the previous screen.

Returns user to the CHSTR/ASSETS Output Selection menu.

Try each command, followed by `<xmit>`, at least once to familiarize yourself with the displays. When you are back at the Output Selection menu, enter A at RETURN TO SELECTION CRITERIA (START AGAIN) and `<xmit>`.

**SHIPS.** To familiarize yourself with the sealift assets of the transportation system, S/F FH is the suitable code to access. Enter S/F FH or *FH, where permitted, and `<xmit>`.

Select B, SHIPS, and `<xmit>`.

```
| 0518042MAR | CHSTR AND ASSETS RETRIEVAL - SHIPS | SUBSYSTEM CODE [F] |
| RV-H08    | X=MENU, Z=EXIT JDS OR FUNCTION CODE [H] |

ENTER SELECTION CRITERIA |
(DONE OR BOTH)

[X] SHIP TYPE CODE
[ ] MOBILIZATION CODE

ENTER VALUE(S) INDICATED (OPTIONAL)

[ ] [ ] AVERAGE SPEED (MIN)    [ ] MTON CAPACITY (MIN)
[ ] DRAFT (MIN)    [ ] MBLS CAPACITY (MIN)
[ ] LENGTH (MIN)    [ ] PAX CAPACITY (MIN)
[ ] SQ FT CAPACITY (MIN)
```

Figure 12.27 CHSTR and Assets Retrieval - Ships

On the selection criterion menu of Figure 12.27, retrieval may be determined by ship type, mobilization code or both. Retrieval may be further limited by speed, dimensions and load capacities.

Enter X at SHIP TYPE CODE and `<xmit>`.

The screen of CHSTR and Assets Retrieval - Ship Types is displayed with an X posted at ALL SHIP TYPES.
Figure 12.28 CHSTR and Assets Retrieval - Ship Types

Selections for ship type retrieval are limited in JOPESCAI to those selected in Figure 12.28. Enter an X at the following:

0901 BREAKBULK CARGO, SLOW
1002 SL-7
1102 RO/RO FAST

<Xmit> and the next display, Specific Ship Selection, is on the screen.

Three ship types and corresponding data on speed, draft, length and capacities are detailed in the Specific Ship Selection screen (Figure 12.29). For further information, use the EXPAND option offered at the bottom of the display.

Enter EXPAND 1102 on the command line to acquire more data on the FAST RO/RO SHIP. <Xmit>.
In the Specific Load Characteristics display (Figure 12.30), speed, draft, length, ship capacities and load/unload figures are provided. Additional information on this RO-RO ship can be obtained by entering EXPAND ASSET on the command line. <Xmit>.

In the Transportation Assets - Ships display (Figure 12.31), the number of ships (of the selected ship type) available under varying mobilization conditions and several ocean operating areas is given. PART 2 includes additional areas, date of last update, and classification.

You have viewed the principal screens available in S/F FH. Type MENU on the command line and <xmit> to return to a screen.
permitting S/F entries. The next data display section is about ports.

PORTS. This function displays data extracted from the JOPES PORTS file and includes such things as seaports, port capacity and harbor data. Begin by entering S/F FI or *FI, where permitted, and <xmit> to access this file.

**Figure 12.32 Ports Retrieval**

The screens derived from the Ports Retrieval menu will vary depending on the selection criteria, such as country/state code, port geo code, weight capacities, storage capacity, or port operations and/or ship accessibility. As indicated in Figure 12.32, enter X at COUNTRY/STATE CODE and <xmit>.

The next screen, Ports - Selection by Country/State Code, requires an entry. If you need to view a list of codes, enter X at VIEW LIST OF COUNTRY/STATE CODES and <xmit>. Otherwise, enter TS (Tunisia) to display all seaports in Tunisia. <xmit>. The Ports - Output Selection screen is displayed stating that 13 seaports have been retrieved. Enter B, DISPLAY OUTPUT REPORT, and <xmit> in order to view the list of seaports.

**Figure 12.33 Specific Port Selection Menu**

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A list of the seaports in Tunisia along with GEO code and country name are listed in Figure 12.33. This is a two-page report. Use a paging command to view the remainder. Enter **EXPAND VKNP** on the command line and <xmit> to view port information on Safaqis.

Figure 12.34 Port General Information

On the screen, as in Figure 12.34, information on everything from electrical and water capabilities to classes of berthing is exhibited. This is only page one of a ten-page report. Use a paging command (e.g., NP (next page)) to view more specific details. After your examination of the screens, enter **MENU** on the command line and <xmit>.

Returning to the Output Selection menu, enter **A** at RETURN TO SELECTION CRITERIA, <xmit>. The Ports Retrieval screen is displayed (Figure 12.32). Choosing SPECIFIC PORT GEO CODE will reveal displays identical to those of COUNTRY/STATE CODE via another route, namely, that of a port geographic code. The other three options will not retrieve any data in JOPESCAI. You may select them to view their primary displays.

We will now turn to the remaining reference file, APORTS (aerial ports), found in Subsystem/Function FJ.

AERIAL PORTS. Extracts from the JOPES reference file, APORTS, is accessible by entering S/F FJ or *FJ, where permitted. <xmit>. The APORTS Retrieval screen is displayed.
The APORTS Retrieval screen is similar to the port retrieval display. The selection criteria, as in Figure 12.35, include country/state code, runway capacity, airfield GEO and runway length.

Enter X at COUNTRY/STATE CODE AND <xmit>.

Enter TS (Tunisia) as your COUNTRY/STATE CODE selection on the resulting screen. <Xmit>.

The APORTS - Output Selection screen indicates that four selections have been retrieved. Enter B at DISPLAY OUTPUT REPORT to reveal these four locations. <Xmit>.

The APORTS Summary Display is accessed for your perusal.

From Figure 12.36, it is evident that the four airfields retrieved are civilian. LCN refers to load configuration number and BE Number is a (basic encyclopedia) number serving as a substitute for classified geographic locations.
By entering EXPAND + GEO code, a second, more detailed report, is accessible. Enter EXPAND HNTK on the command line and <xmit>. APORTS Detail Display appears on the screen.

<table>
<thead>
<tr>
<th>O61610ZMAR</th>
<th>APORTS RETRIEVAL - APORTS DETAIL DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV-J07A</td>
<td>PART 1 OF 2</td>
</tr>
<tr>
<td>GEOLOC - HNTK</td>
<td>COUNTRY/STATE - TUNSA</td>
</tr>
<tr>
<td>AIRFIELD - GABES</td>
<td>STATUS - CIVIL</td>
</tr>
<tr>
<td>RUNWAY LENGTH - 10000 FT.</td>
<td>BE NUMBER - 442200011</td>
</tr>
<tr>
<td>ICAO - DTTG LOAD CLASS - 44</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIRCRAFT RECEPTION</th>
<th>AIRCRAFT PARKING</th>
<th>AVAILABLE STORAGE SPACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARGO STOWS</td>
<td>SQ. FT.</td>
<td></td>
</tr>
<tr>
<td>C5</td>
<td>0</td>
<td>C5</td>
</tr>
<tr>
<td>C130</td>
<td>0</td>
<td>C130</td>
</tr>
<tr>
<td>C141</td>
<td>0</td>
<td>C141</td>
</tr>
<tr>
<td>KC10</td>
<td>0</td>
<td>KC10</td>
</tr>
<tr>
<td>KC135</td>
<td>0</td>
<td>KC135</td>
</tr>
<tr>
<td>LRWC 747</td>
<td>0</td>
<td>LRWC 747</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PASSENGERS</th>
<th>SQ. FT.</th>
<th>THROUGHPUT</th>
<th>CARGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>SQ. FT.</td>
<td>UNIMPROVED</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>CARGO</td>
<td>20 STON/DAY</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>PAX</td>
<td>15320 PAX/DAY</td>
<td></td>
</tr>
</tbody>
</table>

Figure 12.37 APORTS - Detail Display

The detail display of airports (Figure 12.37) consists of two pages. Enter PART 2 on the command line to increase your exposure to this report. <xmit>.

After looking at Part 2, you may return to PART 1, the MENU (Output Selection), END (the previous screen), or EXPAND APRON. None of the airports in Tunisia have an apron. Enter MENU and <xmit>.

JSIT. Enter S/F F1 and <xmit>. General JDS Retrieval, Figure 12.38, is a display detailing what JSIT codes are and how to access HELP for these codes.
JSIT IS A GENERALIZED JDS RETRIEVAL SYSTEM THAT DISPLAYS JDS INFORMATION ON YOUR VIP. YOU OBTAIN DATA BY ENTERING THE TYPE OF INFORMATION DESIRED FOLLOWED BY A CODE OR VALUE. TO USE JSIT WELL YOU MUST KNOW JSIT'S COMMANDS.

COMMAND 'DONE' WILL RETURN YOU TO THE FUNCTION WHERE YOU STARTED THE CURRENT JSIT PROCESS. THE ENTRY '*SF' REQUIRES AN ASTERISK FOLLOWED BY A SUBSYSTEM/FUNCTION CODE. YOU CAN GET MORE DETAILED EXPLANATIONS OF THE JSIT COMMANDS BY ENTERING 'HELP (KEYWORD)' WHERE THE KEYWORDS IDENTIFY THE JDS SUBSYSTEMS. YOU MAY TRANSMIT ON THIS AND EACH SUBSEQUENT HELP SCREEN TO VIEW ALL HELP SCREENS OR JSIT WILL DISPLAY HELP SCREENS IN RESPONSE TO THE FOLLOWING COMMANDS:

- **HELP PLAN** SCREEN DISPLAYED - HELP FOR PLAN INFORMATION
- **HELP UNIT** HELP FOR UNIT INFORMATION
- **HELP REQ** HELP FOR REQUIREMENTS (ULN,CIN,PIN)
- **HELP MOVE** HELP FOR SCHEDULING AND MOVEMENT
- **HELP FM** HELP FOR FORCE MODULE INFORMATION
- **LIST** PROVIDES A LIST OF OPLANS

ENTER JSIT COMMAND, OR 'SF'

Figure 12.38 General JDS Retrieval (JSIT)

The screen (Figure 12.38) is self-explanatory. Continue to Function Code 2 by entering *F2 on the command line and <xmit>. The Predefined Terminal Display appears.

<table>
<thead>
<tr>
<th>SUBSYSTEM/ FUNCTION CODE</th>
<th>SUBSYSTEM/ FUNCTION DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>PLAN INFORMATION</td>
</tr>
<tr>
<td>A3</td>
<td>PLAN STATUS</td>
</tr>
<tr>
<td>B2</td>
<td>ULN/CIN/PIN/UC DATA</td>
</tr>
<tr>
<td>C2</td>
<td>UNIT INFORMATION</td>
</tr>
<tr>
<td>C3</td>
<td>UNIT SUBORDINATE INFORMATION</td>
</tr>
<tr>
<td>C4</td>
<td>UNIT DEPLOYMENT STATUS</td>
</tr>
<tr>
<td>C5</td>
<td>UNIT TASKING DATA</td>
</tr>
<tr>
<td>D2</td>
<td>FORCE MODULE PAGING</td>
</tr>
<tr>
<td>A6</td>
<td>FORCE MODULE ROLLUP</td>
</tr>
<tr>
<td>D6</td>
<td>FORCE MODULE DEPLOYMENT STATUS</td>
</tr>
<tr>
<td>E1</td>
<td>TCC CARRIER/ORGANIC MOVEMENT</td>
</tr>
<tr>
<td>E2</td>
<td>MOVEMENT FOR SPECIFIC LOCATION</td>
</tr>
<tr>
<td>E5</td>
<td>USERID PERMISSIONS</td>
</tr>
<tr>
<td>M5</td>
<td>LOCAL TRANSACTION ACTIVITY</td>
</tr>
</tbody>
</table>

Figure 12.39 Predefined Terminal Displays

PREDEFINED TERMINAL DISPLAY (Figure 12.39) provides a rapid refresher by Subsystem/Function Codes of what information is displayed on various screens.

A similar layout is available for printed reports by entering S/F F3 or *F3, where permitted, and <xmit>. Figure 12.40 is displayed.
PREDEFINED PRINTED REPORTS is a self-explanatory display. This is the final display of the miscellaneous and JOPES reference file functions available in Subsystem F. Other functions in the subsystem will be discussed in the next chapter.
XIII. USER SPECIFIED RETRIEVAL

The most useful and extensive function in Subsystem F is the retrieval function. Subsystem/Function Codes F4 and F8 in JOPESCAI are incorporated into F6.

Subsystem/Function F6, User Specified Retrieval, is set up in JOPESCAI like the Plan Build module in part VI of this manual. Each screen requires specific entries, allowing you to concentrate on the primary alternatives available in JOPES. It is highly recommended that you utilize the HELP and TUTOR screens to guide you through the training sequence. They will also enhance your understanding of each screen's significance.

Begin the training by entering S/F F6 or *F6, where permitted, and <xmit>. Read the training advisory and then press any key to proceed. User Specified Retrieval is the resulting display.

![User Specified Retrieval Screen](image)

**Figure 13.1 User Specified Retrieval**

The screen User Specified Retrieval (Figure 13.1), requires an entry. Input A at TYPE OF RETRIEVAL, to receive reports online, while waiting. The other option, B, is for the batch mode.

<xmit>. The Data Selection Main Menu is displayed. Use the HELP key to obtain the required entry for the JOPESCAI training session.
As directed, enter A at ENTER ONE OPTION, selecting to retrieve requirements data, as in Figure 13.2. The Retrieval/Graphics - Requirements screen is displayed with E and 911PC already posted.

The pre-posted entries are indeed of the correct type and OPLAN available to us in JOPESCAI. Confirm Figure 13.3 by pressing <xmit>. The screen displayed is Data Selection - OPLAN Criteria Menu, with a lengthy list of options.
The OPLAN Criteria Menu offers several options, which can considerably reduce the size of the report received. However, for a comprehensive report, J, ALL REQUIREMENTS, is the appropriate selection (Figure 13.4).

Enter J at ENTER ONE DATA RETRIEVAL OPTION. <xmit>. The Retrieval Monitor, User-Specified Requirements is the new display.

From Figure 13.5, note that TOTAL REQUIREMENTS processed are 40; ULNs, CINs, and PINS processed are 32, 4, and 4 respectively. These numbers may vary, depending on how many database changes have been made.

Press <xmit> to continue. The Data Qualification screen is displayed.
Figure 13.6 Data Qualification

The options offered on the screen and in Figure 13.6 include restarting the session or modifying data selection. The first time through this training module, C - PROCEED TO DATA QUALIFICATION MENU, is the required entry.

Place a C at ENTER ONE OPTION and <xmit>. The Requirements Quick Qualification screen is displayed with X’s posted at ENTER X TO PROCEED, SOURCED ULN, PIN, CIN, and UNSOURCED ULN.

Figure 13.7 Requirements Quick Qualification

An opportunity to narrow down the data retrieval is presented in the Requirements Quick Qualification screen. Make the following changes as shown in Figure 13.7:

Blank out the "X" posted at PIN, CIN and UNSOURCED ULN.

Enter an A at POD MODE to select air.
Press <xmit> and review the Requirements Data Qualification Menu.

Figure 13.8 Requirements Data Qualification Menu

The menu in Figure 13.8 allows you to select various requirement data types. It is actually a four-page menu. You may page through the rest of the menu but cannot make any further qualifications.

Enter 2 at ENTER PAGE NUMBER and <xmit>. Repeat to view pages 3 and 4.

At page 4, continue by pressing <xmit> and the screen, Qualification Criteria Summary, is displayed.

Figure 13.9 Qualification Criteria Summary

The Qualification Criteria Summary, Figure 13.9, is a display-only screen, summarizing the requirement choices selected up to this point.

<xmit> to obtain the Output Selection Menu (Part 1 of 3). Note that D is posted at ENTER 'D' TO DEFINE/MODIFY CURRENT OUTPUT FORMAT towards the bottom of the menu.
The Output Selection Menu will appear several times during the course of the programmed sequence. On the first pass, select Option 2, AD HOC FORMATTED REPORT (TO SCREEN). Enter 2 at CHOOSE AN OUTPUT OPTION, as in Figure 13.10, and <xmit>.

The Output Format Specification - Title Selection screen is displayed.

As with the example in Figure 13.11, this display allows for free text entry of a title for the report. Enter a meaningful title and continue by pressing <xmit>.

Retrieval Graphics - Requirements is the new display on the screen. Leave the number 2 posted at the PART selection.
Figure 13.12 Retrieval/Graphics - Requirements

Place an X by the following data fields, as in Figure 13.12:

- REQUIREMENT NUMBER
- REQ UTC
- REQ UNIT NAME
- ULN STONS
- PAX REQ TRANS

<xmit>. Part 2 of the Requirements display appears, with a 3 at

TO VIEW ADDITIONAL PARTS.

Figure 13.13 Retrieval/Graphics - Requirements (Part 2)
Leaving the 3 posted, place an X beside the following data fields, as in Figure 13.13, so that they will be included in the report:

POE GEO CODE

POD GEO CODE

POD LAD

<Xmit> to receive part 3 of the Requirements display. Do not make any selections and <xmit>. Part 4 is displayed and requires no entries either. Again, <xmit>. Part 1 of the Report Format Specification is displayed.

![Figure 13.14 Report Format Specification - Part 1 of 2](image)

The Report Format Specification allows you to sort, reorder or modify report headings. The column headings are filled in as per the requirements posted in Figures 13.12 and 13.13. You may transmit or change the column headings if desired. Make the following changes, abbreviate some titles, and achieve the result in Figure 13.14:

- Change POE GEO to POE (blank out GEO).
- Change POD GEO to POD (blank out GEO).
- Change POD LAD to LAD (blank out POD).

<Xmit> to receive the user specified and formatted report.

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### Figure 13.15 Retrieval Sorted by REQ NR

The information is presented under the column headings selected, and sorted by REQ NR. Figure 13.15 represents Page 1/Part 1 of the report. Review the other page and parts of the report by executing paging commands. When the review is completed, enter MENU on the command line and <xmit>.

You are returned to the Output Selection Menu. This is the second pass through, therefore enter 7, CREATE/UPDATE FORCE MODULE at CHOOSE AN OUTPUT OPTION. <xmit>. The User Specified FM Processing Menu is displayed.

### Figure 13.16 User Specified FM Processing Menu

Any of the four options available in User Specified FM Processing Menu may be selected. Following the example in Figure 13.16, make the following entries:

**A** at ENTER ONE OPTION.
at FMID.

105MM TANK COMPANY at FIRST TITLE LINE.

<xmit>. The next screen confirms that the transaction has been sent. <xmit> again to return to the Output Selection Menu. This time enter 5, AD HOC TABULAR REPORT and <xmit>.

The Retrieval/Graphics Requirements screen is displayed, presenting an opportunity to define the value of the rows in an Ad Hoc tabular report.

0721072MAR RETRIEVAL/GRAPHICS - REQUIREMENTS SUBSYSTEM CODE [F]
RV-680
? HELP, X=MENU, 2=EXIT JOPES OR FUNCTION CODE [6]

<table>
<thead>
<tr>
<th>ROWS (MANDATORY)</th>
<th>ENTER CODE FROM TABLE</th>
<th>ENTER 'X' FOR LONG NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 FAMILY</td>
<td>12 REQ ULC (U)</td>
<td>23 POE</td>
</tr>
<tr>
<td>2 OPLAN</td>
<td>13 REQ UTC (U)</td>
<td>24 POD</td>
</tr>
<tr>
<td>3 FORCE MODULE ID</td>
<td>14 FORCE DESC-RSVD (U)</td>
<td>25 DESTINATION 36 CEI</td>
</tr>
<tr>
<td>4 REQUIREMENT TYPE</td>
<td>15 SUP CLASS CODE (C)</td>
<td>26 INTERMEDIATE</td>
</tr>
<tr>
<td>5 REQUIREMENT NUMBER</td>
<td>16 CLASS/SUBCLASS (C)</td>
<td>27 ORIGIN CC &lt;DATE RANGES&gt;</td>
</tr>
<tr>
<td>6 FORCE DESC</td>
<td>17 CARGO CAT CODE</td>
<td>28 POE CC</td>
</tr>
<tr>
<td>7 REQ UNIT NAME</td>
<td>18 HEAVY LIFT CODE</td>
<td>29 POD CC</td>
</tr>
<tr>
<td>8 SERVICE/USING ORG</td>
<td>19 FUEL TYPE CODE (C)</td>
<td>30 DEST CC</td>
</tr>
<tr>
<td>9 PROVORG</td>
<td>20 SORTS FIELDS (U)</td>
<td>31 INTMD CC</td>
</tr>
<tr>
<td>10 PROJECT CODE</td>
<td>21 CHANNELS</td>
<td>32 POE M/S</td>
</tr>
<tr>
<td>11 REQ UIC</td>
<td>(U) 22 ORIGIN</td>
<td>33 POD M/S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42 CINC-RDD</td>
</tr>
</tbody>
</table>

| ENTER 'X' TO CONTINUE WITH CURRENT COLUMN DEFINITIONS |

Figure 13.17 Retrieval/Graphics - Requirements

Enter 40 at ROWS, representing the LAD date range (Figure 13.17). <xmit>.

0721152MAR RETRIEVAL/GRAPHICS - REQUIREMENTS SUBSYSTEM CODE [F]
RV-683
? HELP, X=MENU, 2=EXIT JOPES OR FUNCTION CODE [6]

R O W S

| LAD RANGE - START DATE [C000] | END DATE [C030] | INCREMENT [01] |
| C-DAY TO CALENDAR DAY CONVERSION | ENTER DATE FOR C-DAY [C000] IF CONVERSION DESIRED [DDMMYY] |

| ENTER 'X' TO INCLUDE INPLACE ELEMENTS |
| ENTER 'X' TO INCLUDE ONCALL ELEMENTS |

Figure 13.18 ROWS

On the Rows screen, several data fields are filled, including START DATE, END DATE, INCREMENT, AND ENTER ACCUMULATION OPTION. Change END DATE to C030 and let the others remain as posted.
(Figure 13.18). <Xmit> to advance to the next screen, containing Tables A through E.

![Table A - Family #1]

<table>
<thead>
<tr>
<th>FAMILY</th>
<th>#1</th>
<th>COMBINED</th>
<th>REQU/DFLT</th>
<th>SCHED</th>
<th>DEL</th>
<th>S/E</th>
<th>MAC</th>
<th>MAC</th>
<th>MAC</th>
<th>MAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>3</td>
<td>1</td>
<td>E</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>1</td>
<td>E</td>
<td>E</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3</td>
<td>2</td>
<td>E</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
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![Table B - Family #1]

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![Table C - Family #1]

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![Table D - Family #1]

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![Table E - Family #1]

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</tbody>
</table>

**Figure 13.19 Line Values Selection**

In the Line Values Selection (Figure 13.19) screen, the following entries are required for our scenario:

at ENTER UP TO 10 CODES: **1A1A** for Family #1, STONS, Required, MAC and **1C1A** for Family #1, PAX, Required, MAC.

at ENTER LEG: **2** (TO POD).

<Xmit>. Screen RV-686 is displayed for title and column title selections. Column titles are already posted but may be changed if desired.

![Title Information]

**Figure 13.20 Title Information**
As in Figure 13.20, you may enter a title for the graph. Here, **PAX AND CARGO REQUIRED VIA AIR MAC** has been entered. The column titles are appropriate and don't require modification. <Xmit>.

The next screen concerning online rows, columns, sections and subsections requires no entry. <Xmit>. A three page report is displayed for your inspection.

### Figure 13.21 Ad Hoc Tabular Report

The Ad Hoc Tabular Report, as seen in Figure 13.21, is a three page report, beginning with C000 and ending with C030. The column headings and data are in accordance with previously stated requirements. Review the remaining pages by entering a paging command. After you have completed that step, enter **MENU** on the command line and <xmit>.

The Output Selection Menu screen is displayed for the fourth time. Enter **13, AD HOC GRAPH TO SCREEN**, and <xmit>.

You will now pass through a series of familiar screens with your previously entered data. As each appears, press <xmit> to confirm the data's accuracy and proceed to the next screen. Finally, you will reach screen RV-677, with display options.
Several graphical options are available in JOPES, including line, bar and pie styles. In JOPESCAI (Figure 13.22), select A, LINE USING COLS. (The HELP screen incorrectly directs you to select C.) <Xmit>.

Congratulations! With the line graph displayed on the screen you have reached the end point of this scenario. C-Days are represented on the X-axis and quantity on the Y-axis. The upper line graphed is of STONS required, the lower line, PAX required.

<Xmit> to return to the previous screen. Enter Z and <xmit> to return to Output Selection Menu. A training advisory is posted declaring that the fixed path portion of F6 has been completed. You may restart the logical sequence by entering R in the data field below FUNCTION CODE in the upper right portion of the screen.

If you are ready to leave this Subsystem/Function, enter the appropriate codes at Subsystem/Function to proceed to another portion of the program.
XIV. PRACTICE SET

1a. What is the OPLAN number, type, description, security class, C-Day and status of the OPLAN available to you in JOPESCAI?

1b. How did you obtain this information from the system (what Subsystem/Function codes)?

2. What is the JSIT command for retrieving all the PINs in the OPLAN?

3. Retrieve the PIN detail display for PIN MP90000 and identify the following elements: number of passengers, origin geolocation, POE preferred mode and source, force module.

4. What S/F is used to retrieve UNIT MOVEMENT DATA for UIC WHPXAA? After retrieving, summarize the unit movement data in STONs for bulk, oversized, outsized and not air transportable.

5. What is the unit name, UIC and UTC for ULN 9ABC?

6. How do you obtain a listing of Force Modules?

7. Review the information for the All Sea Movement Requirements Force Module 9SA. How many requirements are in the Force Module?

8. Retrieve the listing of all CINs in OPLAN 911PC. Which CIN has the latest LAD and when is it?

9. Add an armor battalion headquarters to the force list. State how many passengers require transportation and the quantity of MTONS oversized. Enter the following data in the display:

<table>
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<th>DATA FIELD</th>
<th>ENTRY</th>
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<tbody>
<tr>
<td>ULN</td>
<td>9AAK</td>
</tr>
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<td>PROVORG</td>
<td>7</td>
</tr>
<tr>
<td>POD SOURCE</td>
<td>K</td>
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<td>POD DISCH</td>
<td>N</td>
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<tr>
<td>CONST</td>
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<tr>
<td>EAD</td>
<td>C002</td>
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<table>
<thead>
<tr>
<th>DATA FIELD</th>
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</thead>
<tbody>
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<tr>
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</tr>
<tr>
<td>POD LOAD CONF</td>
<td>A</td>
</tr>
<tr>
<td>POD GEO CODE</td>
<td>JEAH</td>
</tr>
<tr>
<td>ADD TO FM</td>
<td>9AU</td>
</tr>
</tbody>
</table>

10. The mission is reviewed for the Antiarmor Company, ULN 9AAF, and it is decided that three of the 9 utility trucks are excess. Change this requirement and provide the new level 3 data.
11. Retrieve the itinerary for TCC Carrier T00681. State the offload schedule, including DTG of arrival/departure, and location.

12. How many flights are scheduled to go through EL Borma (GEO code FTZH) between 20OCT91 and 25OCT91? What are their reasons for stopping there?

13. What ULNs are scheduled on carrier T00448? How many PAX? How many STONs are scheduled to move?

14. USMEDCOM requests that MSC Carrier SCC0001 (in JOPESCAI database) stop at Tunis prior to Safaqs and be scheduled to transport retrograde cargo from Safqis to Naples (Italy). The schedule for the additional stops looks like this:

<table>
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<th>LOCATION</th>
<th>ARRIVAL</th>
<th>DEPARTURE</th>
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<td>291300ZOCT91</td>
<td>310600ZOCT91</td>
</tr>
<tr>
<td>Safaqs</td>
<td>011100ZNNOV91</td>
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<td>Naples</td>
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</tbody>
</table>

What are the GEO codes all three locations (be sure that they are PORTS)? What Subsystem/Function will you use to make the changes?

15. You are reviewing unit readiness data. What are the two S/Fs you could use to obtain this information for UIC WABAAA? What is this unit's readiness status? Does one report have an advantage over the other?

16. Identify the units by UIC, which are subordinate to WABAFF and over which WABAFF has operational control.

17. Determine the unit deployment status for FMID 9AA as of 230001ZOCT91. Cite the "ARRIVED AT POD" status for the unit in terms of PAX, STONs, and MTONs.

18. Conduct a CIRCLE SEARCH of the geographic area surrounding Jerba using a search radius of 100NM. Identify by GEO all ports retrieved.

19. Using the TUCHA retrieval system, list the cargo category codes germane to the Chemical Company with a UTC of G2222.

20. The Equipment Identification Code (EIC) for a jeep is 2030701. Using the TUDET retrieval system, state the dimensions of this vehicle.

21. Under Mobilization Condition 41, what are the speed (decimal point is missing on the screen!) draft, length, and MTON/hr load capacity for a slow breakbulk cargo ship?
22. Execute the scenario in S/F F6 until the final line graph is displayed. Sketch the graph, include all titles and labels.
XV. SOLUTIONS TO PRACTICE SET

1a. OPLAN number: 911PC
Type: N - Normal
Description: Show of force in Tunisia
Security class: Unclassified
C-Day: 15Oct91
Status: Available

1b. Obtained in any of the following ways:

- Enter A at SUBSYSTEM CODE and
  enter 1 or 2 at FUNCTION CODE and
  leave OPLAN blank and
  enter E or R at DATABASE.
- Enter E or R at DATABASE and LIST on the command line.

2. P

3. Enter S/F BE, <xmit>, and then MP90000 at PIN DETAIL DISPLAY
   and <xmit>, or enter P MP90000 on the command line.

   Number of passengers: 750
   Origin geolocation: Camp Lejeune
   POE preferred mode: Land
   POE preferred source: MTMC
   Force Module: 9SE

4. S/F BE
   Bulk 131.0 Oversized 215.3 Oversized 0 NAT 0

5. Unit name: 0388 Computer Repair Squadron
   UIC: FFJ1G0
   UTC: HFAGA

   Three means of retrieval are provided. The most direct is to
   enter U 9ABC on the command line. Another method is to enter
   U on the command line and obtain a listing of all ULNs.
   Finally, you could enter S/F BE and then 9ABC at ENTER ULN
   FOR DETAIL DISPLAY.

6. Enter S/F D2 or JSIT code *D2.

7. A total of 11; 10 ULNs, 0 PINs, and 1 CIN. Obtained by
   entering S/F D2 <xmit> and then entering FM 9SA on the
   command line and <xmit>.

8. Use S/F BE. CIN MR90000 has a LAD of C060.

352
9. PAX requesting transport = 187. MTONs OVERSIZED = 18,604

Obtained by using S/F BL. Enter A at FUNCTION CODE to ADD. Then complete entries as per the table provided in problem 8. Enter X to view PART 2. <Xmit>. Enter X to RETURN TO PART 1 AFTER COMPLETION. Enter A at Critical Employment Indicator. <Xmit> and you will return to the previous screen with additional data filled in.

10. Level 3 data is now:
   Sq. ft.: 2620
   STONs: 85.7
   MTONs: 375
   CBBLS: 0
   HL (heavy lift): A

   Use S/F B7 and then follow section VII on "Tailor Force Cargo" which provides the method for obtaining this information.

11. Retrieve using S/F ET. Offload (unload) schedule is as follows:

   DTG arrival: 240735ZOCT91
   DTG departure: 241050ZOCT91
   GEO location: JERBA/ZARA (Zarzis)

12. Five flights, all for offloading. The appropriate subsystem/function is EU.

13. Use S/F ET. ULN 9AAB; 101 PAX; 5.3 STONs.

14. Tunis - XJCS; Safaqis - VKNP; Naples - RGJW.
   Use S/F EG to insert the stop at TUNIS. Use EF to change the itinerary departure/arrival times for Safaqis. Use S/F EI to add the last stop at Naples.

15. Use S/F C1 or S/F C2. The readiness ratings are "1" across the board. S/F C2 produces a display in plain language which obviates the need to look up GEO codes and other acronyms or abbreviations.

16. Use S/F C3. UICs are: WHPXAA and WABTAA.

17. Use S/F D8. Enter A in ENTER REPORT TYPE OPTPION CODE. Enter 9AA at ENTER AN FMID. Enter 230001ZOCT91 at ENTER AS-OF-DATE. <Xmit>.

   PAX = 85
   STONs = 262
   MTONs = 40

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18. Use S/F FE. Ports are: ADLS, APFD, APRJ, FGTW, HNTS, and VKNP.

19. Use S/F FF. Cargo Category Codes (CCCs) are: J7C, M7C, R1D, R2B, R2D.

20. Use S/F FG. Length = 133 inches; width = 64 inches; height = 71 inches.

21. Use S/F FH and select MOBILIZATION CODE. On Screen RV-H10 speed = 16.3; draft = 40; length = 950; MTONs capacity = 15,078. Using the EXPAND command produces slightly different data on Screen RV-H11; speed = 16.0, draft = 38, length = 950, MTONs capacity = 11,638.

22. The graph appears as below:

![Graph Image]

UNCLASSIFIED
OPLAN 911PC
CARGO AND PAX REQUIRED

--- STONS REQD       ------ PAX REQD

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## XVI. LISTING OF JOPES FUNCTIONS

<table>
<thead>
<tr>
<th>Subsystem</th>
<th>Function</th>
<th>Description of Function</th>
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<tbody>
<tr>
<td><strong>PLAN INFORMATION SUBSYSTEM</strong></td>
<td>A 1</td>
<td>Update Plan Information</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Display Plan Information</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Display Plan Status</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Plan Description Report</td>
</tr>
<tr>
<td></td>
<td>B 1</td>
<td>Update OPLAN from TUCHA</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Duplicate ULNs</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Merge Requirements</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Update CIN/PIN Ident Routing Data</td>
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<tr>
<td></td>
<td>5</td>
<td>Rename Requirements</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Tailor Force Cargo Data</td>
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<td></td>
<td>8</td>
<td>Create JOPES TPFDD</td>
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<td>9</td>
<td>Range Update/Delete ULNs/CINs/PINs</td>
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<tr>
<td></td>
<td>E</td>
<td>Display ULN/CIN/PIN/UIC Data</td>
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<tr>
<td></td>
<td>F</td>
<td>Master Force List Report</td>
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<td></td>
<td>G</td>
<td>Requirements Detail Reports</td>
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<td></td>
<td>H</td>
<td>F11D/F11E Reports</td>
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<tr>
<td></td>
<td>I</td>
<td>Logical Errors Report</td>
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<td></td>
<td>J</td>
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<td>K</td>
<td>Tailor Nonunit Cargo Records</td>
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<td></td>
<td>L</td>
<td>Force Requirement Data</td>
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<td><strong>REQUIREMENTS SUBSYSTEM</strong></td>
<td>C 1</td>
<td>Update Unit Information</td>
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<tr>
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<td>2</td>
<td>Display Unit Information</td>
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<td>Display Unit Subordinate Information</td>
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<td>4</td>
<td>Display Unit Deployment Status</td>
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<tr>
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<td>5</td>
<td>Display Unit Tasking Data</td>
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<td>6</td>
<td>Unit Tasking Report</td>
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<td>7</td>
<td>Plan Compare Report</td>
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<td><strong>UNIT INFORMATION SUBSYSTEM</strong></td>
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<tr>
<td><strong>FORCE MODULE SUBSYSTEM</strong></td>
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<td>D 1</td>
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<td>3</td>
<td>Force Module Reports</td>
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<td>4</td>
<td>Plan Build</td>
</tr>
</tbody>
</table>

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SCHEDULING AND MOVEMENT SUBSYSTEM

E   E  Add/Delete TCC Carrier
F   F  Change TCC Carrier
G   G  Insert Itinerary for TCC Carrier
I   I  Add New Itinerary to TCC Carrier
J   J  Divert TCC Carrier
K   K  Add/Delete Organic Movement
L   L  Change Organic Movement
M   M  Insert Itinerary for Organic Movement
N   N  Add New Itinerary Organic Movement
O   O  Divert Organic Movement
P   P  TCC Sea Manifesting
Q   Q  Manifest TCC Carrier/Organic Movement
S   S  Report Actual Depart/Arrive Times
T   T  Display TCC Carrier/Organic Movement
U   U  Display Movement for Specific Location
V   V  Display TCC/Organic Movement List
W   W  Override Leg Codes
1   1  Movement Schedule Report
2   2  Movement Manifest Report
3   3  Channelized Requirements Report
4   4  Schedule Flow Analysis Report
5   5  Port Movement Workload Report
7   7  Deployment Summary Report
8   8  Force Module Movement Summary Report

RETRIEVAL SUBSYSTEM

F   1  General JDS Retrieval (JSIT)
2   2  Predefined Terminal Displays
3   3  Predefined Printed Reports
4   4  User Specified Retrievals
6   6  Retrieval/Graphic Beta System
8   8  Joint Planning and Execution Graphics
E   E  GEOFILE
F   F  TUCHA
G   G  TUDET
H   H  CHSTR/ASSETS

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**USERID PERMISSIONS SUBSYSTEM**

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