

JOINT COMMAND AND CONTROL DOCTRINE STUDY



1 FEBRUARY 1999



JOINT WARFIGHTING CENTER

FENWICK ROAD BLDG 96
FORT MONROE VIRGINIA 23651-5000

1 February 1999

MEMORANDUM FOR DIRECTOR, OPERATIONAL PLANS AND INTEROPERABILITY

Subj: Joint Command and Control Doctrine Study

1. As requested by the co-chair (J38/DSOD, Joint Staff) of the Command and Control (C2) Doctrine Working Group held from 9 to 10 December 1998, we conducted a detailed study of joint doctrine on C2. Our findings indicate that C2 guidance is available in nearly all joint publications and most of the C2 doctrine subject areas developed by the working group are adequately covered.
2. We recommend not developing a separate joint publication on C2. As a more efficient alternative, we recommend expanding, modifying, or strengthening the doctrine, as required, in Chapters III and IV of JP 0-2, "Unified Action Armed Forces." JP 0-2 is near the beginning of its revision cycle.
3. A printed copy of our report, along with a CD-ROM containing a portable document format version of the report and the referenced publications, is hereby provided. The report version located on the CD-ROM may be opened using Adobe Acrobat Reader software, which allows the reader to use the hyperlinks to the cited references.
4. This study should receive the widest possible dissemination to interested parties, to include placement on the Chairman's Joint Doctrine Home Page on the World Wide Web.


JAMES W. MOREHOUSE
Brigadier General, USAF
Deputy Commander

Attachments

Distribution:

Joint Staff (JDD)
Joint Staff (J-38/DSOD)
HQDA (DAMO-SSP)
USACOM JWFC (J7, JW01, JW100)

Intentionally Blank

TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY.....	EX-1
CHAPTER I	
INTRODUCTION	
• Section A: Purpose	I-1
• Section B: Methodology	I-1
• Section C: Data Collection.....	I-1
• Section D: Administrative.....	I-2
CHAPTER II	
DATA SUMMARIES	
• Section A: Approved Joint Doctrine	II-1
• Section B: Draft Joint Doctrine	II-59
• Section C: Other Documentation	II-79
CHAPTER III	
ANALYSIS RESULTS	III-1
CHAPTER IV	
CONCLUSIONS.....	IV-1
CHAPTER V	
RECOMMENDATIONS	V-1
APPENDIX	
A. Command and Control Doctrine Working Group Message	A-1
B. Command and Control Doctrine Working Group Subject Areas.....	B-1
GLOSSARY	
Part I Abbreviations and Acronyms	GL-1
Part II Terms and Definitions	GL-5
ENDNOTES.....	EN-1

Intentionally Blank

EXECUTIVE SUMMARY

INTRODUCTION

This report provides study results, analysis, conclusions, and recommendations addressing whether existing joint doctrine should be strengthened or a separate command and control (C2) publication should be developed.

This report provides study results concerning the availability and adequacy of approved joint doctrine on command and control (C2) requested by the co-chair (J38/DSOD, Joint Staff) of the C2 Doctrine Working Group and the Chief of the USACOM Joint Warfighting Center Doctrine Division. Pertinent data was gathered from approved and draft joint publications, Chairman of the Joint Chiefs of Staff (CJCS) Instructions and Manuals, and Service doctrine publications. Analysis of the data centered around the availability and coverage in joint publications of the C2 subject areas derived during the December 1998 C2 Doctrine Working Group. Approved and draft joint doctrine and joint tactics, techniques, and procedures (JTTP) on C2 was assessed for adequacy. Conclusions were drawn regarding the effectiveness of approved and emerging joint doctrine to address those C2 subject areas. Finally, recommendations were made regarding strengthening joint doctrine or developing a separate C2 publication.

APPROVED JOINT DOCTRINE

JPs 0-2, "Unified Action Armed Forces," and 5-00.2, "Joint Task Force Planning Guidance and Procedures," along with 16 others, provide at least a chapter on C2 or a related subject such as organization or command relationships. Others like 3-56.1, "Command and Control of Joint Air Operations," were designed to address specific C2 issues.

General. JPs 0-2, "Unified Action Armed Forces," 1-0, "Doctrine for Personnel Support to Joint Operations," 2-0, "Joint Doctrine for Intelligence Support to Operations," 4-0, "Doctrine for Logistic Support of Joint Operations," and 5-00.2, "Joint Task Force Planning Guidance and Procedures," along with 13 others devote at least a chapter to C2 or a related subject such as organization or command relationships. JPs 3-08 Vol I, "Interagency Coordination During Joint Operations Vol I," 3-13.1, "Joint Doctrine for Command and Control (C2) Warfare," 3-56.1, "Command and Control of Joint Air Operations," and 6-0, "Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operation," were designed to address specific C2 issues.

JP 0-2 describes command as central to all military action, and unity of command as central to unity of effort. JP 3-0, "Doctrine for Joint Operations," contains a major paragraph that discusses, among other items, the nature of C2, the elements of command, and the elements of control.

Joint operation planning provides procedures for coordinated problem solving and decisionmaking.

Joint publications provide information on the theater C2 architecture for intelligence, air-ground operations, special operations, and air control system.

Numerous joint publications discuss the many centers, boards, and elements, along with liaison officers and organizations as part of the C2 system.

Basic Tenets. JP 0-2 describes command as: "central to all military action, and unity of command is central to unity of effort. Inherent in command . . . is the authority that a military commander lawfully exercises over subordinates and confers authority to assign missions and to demand account-ability for their attainment." JP 3-0, "Doctrine for Joint Operations," contains, in Chapter II, a major paragraph on C2. It discusses the nature of C2, elements of command, elements of control, purpose of control, tools for implementing command decisions (communications, computers, and intelligence), and the importance of liaison to joint force C2. JP 3-0 also lists unity of command as a principle of war.

Decisionmaking Process. Joint operation planning employs an integrated process entailing similar policies and procedures during war and military operations other than war (MOOTW), thereby providing for orderly and coordinated problem solving and decisionmaking.

Theater-level C2 Structure. JP 2-0 dedicates an entire chapter to the joint intelligence architecture. JP 3-05, "Doctrine for Joint Special Operations," describes theater-level special operations forces (SOF) C2 and SOF operational control. JP 3-09, "Doctrine for Joint Fire Support," contains a figure that illustrates in detail the theater air ground system coordination links. JP 3-17, "JTTP for Theater Airlift Operations," devotes a major paragraph to the theater air control system.

C2 Nodes. JP 5-00.2 contains a major paragraph on centers, boards, and cells, along with a section on "Joint Task Force (JTF) Liaison Personnel." It also addresses the joint operations center, joint search and rescue center (JSRC), and joint fires element (JFE). Other publications discuss SOF liaison officers and organizations, the joint air operations center, joint rear area coordinator and tactical operations center, and the base defense operations center.

Joint force commanders (JFC) synchronize the actions of their forces.

Joint Force Commander's (JFC) Role. JP 3-0 explains that JFCs synchronize the actions of air, land, sea, space, and special operations forces to achieve strategic and operational objectives through integrated, joint campaigns and major operations. JP 5-00.2 says that the commander, joint task force (CJTF) must synchronize the actions of all the forces. In some operations, the CJTF will have to coordinate military actions with those of nonmilitary organizations (e.g., nongovernment organizations (NGO) and private voluntary organizations (PVO)).

Multinational force C2 considerations regarding intelligence; operations; logistics; planning; and command, control, communications, and computer (C4) systems support is provided in several joint publications.

Multinational C2 Considerations. JP 1, "Joint Warfare of the Armed Forces of the United States," addresses "multinational endeavors" in a section of Chapter III, "Fundamentals of Joint Warfare." JP 3-0 contains an extensive discussion (three pages) about C2 during multinational operations. JP 5-00.2 contains guidance on multinational considerations for C2, intelligence operations, operations, logistics, planning, and C4 systems support.

Guidance on the C2 of transient forces is contained in JP 0-2.

Expeditionary Force C2 En route. JP 0-2 explains that transient forces do not come under the chain of command of the area commander solely by their movement across area of responsibility (AOR)/joint operations area (JOA) boundaries.

The JFC's desired effects of weapons and maneuver influence joint force actions.

Effects-based Operations. Several JP 3-0 series publications describe the actions of the joint force as dependent on the JFC's desired effects of weapons or maneuver on the enemy.

The four basic command relationships are discussed in detail in JP 0-2

Basic Command Relationships. JP 0-2 devotes a chapter to command relationships. Each authority (combatant command (command authority) (COCOM), operational control (OPCON), tactical control (TACON), and support) is described in detail. JP 5-00.2 goes on to explain the duties of the supported and supporting commanders.

Command relationships regarding theater special operations forces (SOF)

Strategic-level Command Relationships. JP 3-05 contains guidance on the command relationships between theater SOF and other organizations at the

and C2 of airlift forces at the strategic level are illustrated in joint publications.

The JFC establishes operational control (OPCON), tactical control (TACON), and support relationships between components to facilitate operations.

Command relationships between multinational forces must be simple and clear. The President always retains command authority over US forces.

JP 0-2 provides the doctrine and policy for establishing joint commands and organizational options of unified, specified, subordinate unified, and JTF commands, along with discussions of Service and functional components.

Basic organization principles are discussed in JP 5-00.2.

JP 5-00.2 has a comprehensive

strategic level. A figure is provided to illustrate theater-level C2. JP 4-01.1, "JTTP for Airlift Support to Joint Operations," contains a discussion on command and control of airlift forces and a figure illustrating common-user airlift command relationships.

Operational/Tactical Level Command Relationships. A joint force special operations component commander (JFSOCC) normally has OPCON of assigned forces and a joint force air component commander (JFACC) is normally delegated TACON of the sorties or other military capability made available. JFCs also may establish a supporting and/or supported relationship between components to facilitate operations.

Command Relationships in Multinational Operations. JP 0-2 explains that complex or unclear command relationships or organization are counterproductive to developing synergy among multinational forces. JP 5-00.2 notes that the President retains and will never relinquish command authority over US forces.

Organization of Joint Forces. Section A (Doctrine and Policy for Establishing Joint Commands) in Chapter IV of JP 0-2 addresses the authority to establish, basis for establishing, composition, responsibilities of the commander, and organizational options of unified, specified, subordinate unified, and JTF commands. Additionally, Section B of Chapter IV in JP 0-2 contains two major paragraphs on Service and functional components.

Basic Organizing Principles. JP 5-00.2 addresses JTF organization principles such as unity of effort, unity of command, centralized planning, decentralized execution, common doctrine, a command emphasis on interoperability, and other factors like the mission.

Subordinate Commands. JP 5-00.2 addresses Service components, functional components, and

discussion of joint force components and special purpose subordinate task forces. All joint forces include Service component commands and JFCs may establish functional components to provide centralized directions of certain functions.

The joint task force commander may be dual-hatted as a component commander.

Multinational forces should be added to the joint organization in the simplest way possible.

Basic organization of the joint force staff is contained in JPs 0-2 and 5-00.2. Specialized guidance for the J-1, J-4, and information operations cell is provided in keystone and subordinate joint publications..

special purpose subordinate task forces. There are extensive discussions on functional components in general and the JFACC, joint force land component commander (JFLCC), joint force maritime component commander (JFMCC), JFSOCC, joint civil-military operations task force (JCMOTF), and joint psychological operations task force (JPOTF). All joint forces include Service component commands because administrative and logistic support for joint forces are provided through Service component commands. JFCs may establish functional components to provide centralized direction and control of certain functions and types of operations when it is feasible and necessary to fix responsibility for certain normal, continuing functions, or when it is appropriate and desirable to establish the authority and responsibility of a subordinate commander.

Dual-hatting Considerations. JPs 0-2 and 5-00.2 allow the CJTF to be dual hatted as a component commander, but it is not recommended.

Multinational Organization Considerations. JP 0-2 advises that when organizing joint forces with multinational forces, simplicity and clarity are critical. As in the case of joint operations, basic multinational options are area or functional orientation and single-Service or joint organization, to which are added national or multinational organization as shown in JP 3-0, Chapter IV.

Organization of the JFC's Staff. JP 0-2 contains basic guidance for organizing a joint force staff and the staff organization with sections on each principle member. JP 5-00.2 contains a major paragraph on "staff organization" and a detailed figure illustrating a typical JTF staff organization. Chapter II also contains a major paragraph on "JTF headquarters' functions" and a section on "key functions and responsibilities" of the principal JTF headquarters members. Chapters V through IX are used to describe the organization, functions, and responsibilities of the JTF directorates. JPs 1-0, "Doctrine for Personnel Support to Joint

Operations,” 4-0, and 3-13, “Joint Doctrine for Information Operations,” address the detailed joint force staff organization for the J-1, J-4, and information operations (IO) cell.

Each component having significant forces assigned will be appropriately represented in key positions on the JTF staff.

Guidelines for Selection, Formation, and Organization. JP 5-00.2 declares that the JTF staff will be composed of appropriate members in key positions of responsibility from each Service or functional component having significant forces assigned to the command.

A joint force headquarters (HQ) may be formed from a standing JTF HQ, a Service component HQ, or ad hoc from various contributors, but it must support mission success.

Joint Force Staff Options and Factors. JPs 1-0 and 5-00.2 explain that there are several options that may be used to form a joint force headquarters (HQ) (e.g., use the combatant command staff, augment a core Service component HQ, use a standing JTF HQ, form ad hoc from various contributors). Whatever option is used, a building process will be necessary. This process must support the mission and provide the best opportunity for success. The mission may dictate forming a civil-military operations center (CMOC) as described in JP 5-00.2 or an IO cell as illustrated in JP 3-13.

The JTF staff helps the CJTF direct, control, and coordinate subordinate component command activities.

Functions and Responsibilities. The JTF staff, as described in JP 5-00.2, assists the CJTF to direct, control, and coordinate operations of assigned and attached forces and to coordinate planning activities of subordinate component commands.

The multinational force headquarters organization should reflect the force composition.

Multinational Considerations. JP 0-2 advises that a multinational headquarters should reflect the general composition of the multinational forces as a whole. JP 5-00.2 adds that when multinational forces are part of the JTF, members of these forces should be integrated into the staff.

JP 0-2 addresses process of the JFC’s staff such as developing estimates.

The JFC’s Staff Processes. JP 0-2 discusses estimates, decisions, directives, and follow-through in general terms.

The concepts of flattening, span of control and reachback are

Flattening, Span of Control, and Reachback. Flattening (nonproliferation of staffs) is not addressed. Span of control is described as the

discussed very little or not at all in approved joint publications.

Collaborative planning between the combatant command and JTF levels is illustrated in JP 5-00.2.

Numerous publications provide guidance on writing all or parts of operation orders and related plans.

Information management is described as a command problem facilitated by numerous information systems and the identification of the commander's critical information requirement.

The development, analysis, comparison, and selection of courses of action (COA) is primarily discussed in the JP 5-0 series publications.

JFC's ability to command and control actions and related to the duration and scope of joint air operations. Reachback capability is addressed in the JP 2-0 series as a capability the J-2 should possess to fulfill the JTF's intelligence requirements.

Collaborative Planning. JP 5-0, "Doctrine for Planning Joint Operations," describes and elaborates on the Joint Operation Planning and Execution System (JOPES). The collaborative planning relationship between combatant command and JTF levels is illustrated in Figure IX-24 of JP 5-00.2.

Writing Orders. JP 5-00.2 contains guidance on order preparation and a sample operation order (OPORD) format. Other publications contain guidance on developing annexes for personnel and logistics or plans for joint air operations, airspace control, and base defense.

Information Management. JP 6-0 explains that command is as much a problem of information management as it is of carrying out difficult and complex warfighting tasks. Several systems such as JOPES (JP 5-0), the Global Command and Control System (GCCS), Medical Planning and Execution System, and Status of Resources and Training System, among others, are described in various joint publications as critical to information management. Commander's critical information requirements are described in JP 5-00.2 as a comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management.

Course of Action (COA) Development and Analysis. JP 5-0 provides a summary of actions surrounding COA development and analysis for both deliberate and crisis-action planning. JP 5-00.2 contains subparagraphs for COA development, COA analysis, COA comparison, and COA selection. Other publications provide guidance for the development of personnel, intelligence, and logistics staff estimates to support COA development and analysis.

A comprehensive discussion of the commander's estimate process is provided in JP 3-0.

JP 5-00.2 is the primary reference for doctrine on the numerous board, centers, and cells that can be formed in a joint force.

Information fidelity is not a joint doctrine term, but the concept of providing accurate and timely information to decisionmakers is discussed in joint doctrine.

Organization of operational areas is primarily discussed in JP 3-0, which addresses among other items the joint operations area, area of operations, joint rear area, and communications zone.

JP 6-0 series publications were designed to provide guidance on the use of C4 systems to process information and support C2 and decisionmaking.

Commander's Estimate Process. JP 3-0 addresses mission analysis, the mission statement, situation analysis, COA analysis, analysis of opposing COAs, comparison of own COA's, and the commander's decision in Appendix B, "The Estimate Process."

Boards and Agencies [Centers and Cells]. The various boards, centers, and cells that can be formed in a joint force to include the joint targeting coordination board (JTCB), joint intelligence support element, joint personnel reception center, JFE, logistics readiness center (LRC), IO cell, CMOC, and the JSRC are described in various joint publications, primarily JP 5-00.2.

Information Fidelity is not used but there are numerous references joint publications about the need for **accurate and timely information** in general and specifically, information regarding isolated personnel; deploying personnel, equipment, and supplies; nuclear weapons release; airspace control; targets; press releases; early warning; and intelligence on the battlespace.

Organization of the Theater, Area, or Battlespace (Operational Areas). JP 3-0 discusses and illustrates the organization of an operational area. A major paragraph includes descriptions of the JOA, joint special operations area (JSOA), joint rear area (JRA), amphibious objective area (AOA), area of operations, area of interest, theater of war, theater of operations, and combat and communications zones. Other publications such as 3-05 and 3-10.1, "JTTP for Base Defense," support and amplify doctrine on the JSOA and JRA.

C2 Systems and Their Relationship to the JFC's C2 Process. JP 6-0 was developed to addresses how C4 systems support the commanders of joint forces in the conduct of joint operations. It addresses, among other thing, the role of C4 systems in C2, processing information, the relationship between information and the C2 support system, and decision support systems. JP 6-02, "Joint Doctrine for Employment of Operational/ Tactical Command, Control, Communications, and Computer Systems," includes

thorough descriptions of numerous Defense-wide and joint C4 systems and Service C4 systems.

Joint publications do not address weapons systems C2 systems.

C2 Systems and Weapon Systems C2 Systems. Doctrine on C2 systems for weapons systems is not provided in joint publications.

Joint doctrine describes both C2 systems that carry or convey essential information like video teleconferencing and the essential information itself such as a fragmentary order.

Relationship between C2 systems (Video teleconferencing (VTC), Home Page) and process (fragmentary order). Joint forces require secure VTC, data base connectivity, direct downlink, and broadcast/receive capabilities for reachback access to intelligence, logistics, and other essential support data. A fragmentary order is an abbreviated form of an OPOD, usually issued on a day-to-day basis, that eliminates the need for restating information contained in a basic OPOD.

Joint doctrine provides guidance for coalition structures and C2 while discussing multinational operations.

Coalition C2 Guidance. Most of the guidance on coalitions is contained in the previous paragraphs that discuss multinational operations. Coalitions are most often characterized by one of three basic structures: parallel, lead nation, or a combination of the two. In coalition operations, member nations may desire to retain even more control of their own national forces than is generally associated with alliance operations. See Chapter IV of JP 3-0

JP 3-08, "Interagency Coordination During Joint Operations Vol I," is the primary reference for guidance, among other items, on interagency coordination when forming a JTF, command relationships, and the civil-military operations center.

Interagency Guidance. JP 3-08 is designed to provide guidance on coordination between the combatant commands and agencies of the US Government, PVOs, and regional and international organizations during joint operations. It specifically addresses interagency coordination at the National level when forming a JTF and coordination with State and Local authorities during foreign operations; command relationships; organizing for success at the operational level; information management; JTF mission analysis; JTF organizational tools; and the CMOC.

The interface of military commanders with civilian authorities routinely involves installation commanders and state,

Interface of Civil Command Structure with JFCs. JP 3-08 Vol I advises that Department of Defense (DOD) interaction with state and local authorities can take the very visible form of military support to civilian authorities or the more routine involvement

county, and municipal official.

The JP 3-07 series publications provide general and specific C2 doctrine for conducting foreign internal defense, counterdrug operations, and noncombatant evacuation operations.

Changing information in automated data processing systems requires strict controls.

There is a definition for “commander’s critical information requirements,” but not “common operational picture.”

Four joint publications in the approval stage provide at least a chapter to C2 or a related subject like command relationships. Joint doctrine on multinational operations was designed, in part, to address a unique C2 issue.

of commanders of DOD installations with state, county, and municipal governments.

C2 and nontraditional/asymmetric operations (MOOTW). Joint doctrine JTTP for MOOTW is discussed in the JP 3-07 series publications. Specifically, JP 3-07, “Joint Doctrine for Military Operations Other Than War [MOOTW],” provides some general C2 guidance. JP 3-07.1, “JTTP for Foreign Internal Defense (FID),” provides guidance on organizing for FID in combatant commands, including the staff and joint task forces. JP 3-07.4, “Joint Counterdrug Operations,” contains major discussions or detailed illustrations on counterdrug organizations and organizational relationships. JP 3-07.5, “JTTP for Noncombatant Evacuation Operations,” addresses, among other subjects, command relationships and the chain of command.

Database management/Control/Authority to Change. JP 2-0 advises that strict controls should be applied to changing information in automatic data processing systems that can be accessed by other organizations.

Definitions. The recently approved JP 5-00.2 provides a definition of “commander’s critical information requirements,” however, definitions for “common operational picture (COP)” and “common tactical picture” are not available in approved joint doctrine.

DRAFT JOINT DOCTRINE

General. JPs 3-01, “Joint Doctrine for Countering Air and Missile Threats” (final coordination (FC)), 3-07.6, “JTTP for Foreign Humanitarian Assistance” (preliminary coordination (PC)), 3-16, “Joint Doctrine for Multinational Operations” (FC), and 3-18, “Joint Doctrine for Forcible Entry” (PC), all devote at least a chapter to command and control or a related subject such as organization or command relationships. JP 3-16 (FC) was designed, in part, to address a unique C2 issue.

With few exceptions draft publications do not add significantly to C2 theory and do not address a “joint warfighting model” directly. Some draft publications reinforce the notion that joint operation planning is a decision making model.

The theater and JFC-level C2 actions that support decisionmaking, establishment of C2 nodes, dissemination of a common operational picture, synchronization of forces, multinational operations, C2 of forces enroute, and decisionmaking based on effects are addressed in draft publications. The principles described generally reinforce doctrine in approved publications.

C2 Description and Theory. Draft joint publications do not identify new or modify existing **basic C2 definitions** and the **basic tenets of C2** are built-in or repeat those in approved joint publications. The **decision making process** is described as selecting a COA and developing an operations plan (OPLAN) or OPORD that implements it. JP 3-35, “Joint Deployment and Redeployment Operations (PC),” contains paragraphs on JOPES, deliberate planning, crisis action planning, and a figure illustrating a summary of both processes. JP 5-00.1, “JTTP for Joint Campaign Planning” (PC), contains two paragraphs that discuss campaign planning and JOPES and theater planning actions. Direct references to a **“joint warfighting model”** were not discovered.

Theater/JFC-level C2. Battle damage assessment, joint intelligence preparation of the battlespace (JIPB), and the gathering of accurate information are described as essential support processes to **decisionmaking**. JP 3-01 (FC) addresses the JFC, JFC’s staff, JTCB, JFACC, JAOC, area air defense commander (AADC), ACA, component commanders, multinational considerations, and command, control, communications, computer, and intelligence requirements. The GCCS **COP** may include relevant information from the tactical to the strategic level of command. The JTCB, humanitarian assistance coordination center, and LRC are some **C2 nodes** described in draft publications. JP 3-18 (PC) addresses **synchronization considerations** during each phase of a forcible entry operation. JP 3-16 (FC) provides a discussion of **C2 in a multinational operation**. It contains major paragraphs on the multinational force commander (MNFC), control of multinational operations, and civil-military coordination. Guidance on **Expeditionary force C2 enroute** established in approved joint doctrine is reinforced in JP 3-35 (PC) by describing the status of transiting intertheater mobility forces. At least three draft publications reinforce the notion that the JFC and staff should **specify desired effects** on the enemy and analyze resultant effects to determine further actions.

Draft joint publications address command relationships at the strategic and operational level and for multinational operations. Subject areas range from the relationships between key National security structure member to relationships during forcible entry planning to foreign OPCON.

Basic organizing principles, component structures and dual-hatting are lightly addressed in draft publications; however, multinational force organization is discussed in depth.

The joint force staff and the elements of the multinational force commander's staff are addressed in two draft publications.

Current draft publications do not address flattening, reachback and information fidelity. Other concepts like span of control and information management are rarely mentioned. There is more definitive

Command Relationships. At the **strategic level**, JP 3-16 (FC) addresses the National security structure and Figure II-1 illustrates the relationships between key members. At the **operational/tactical level**, draft publications address the support relationship regarding the AADC; the authority of functional components over forces made available for tasking; and employing a combination of forces, C2 of SOF, and relationships during planning for forcible entry operations. JP 3-16 (FC) addresses the principles of **command relationships in a multinational environment**. OPCON, foreign OPCON, TACON, support, coordinating authority, and chain-of-command are addressed in detail.

Organization of Joint Forces. There are scattered pieces of guidance regarding **basic organizing principles** like centralized planning, **component structures** such as the JFACC and JSOTF, and **dual-hatting** of the JFACC and AADC in draft publications. **Multinational force organization** is addressed in JP 3-16 (FC), which provides an overview of multinational command structures and specifically addresses alliance and coalition command structures and liaison, and coordination centers.

Organization of the JFC's Staff. Considerations for unity of effort and the J-4 organization during peace and war are discussed. JP 3-01 (FC) contains a paragraph on the joint force staff. It includes subparagraphs for each staff division outlining their responsibilities regarding counterair operations. JP 3-07.3, "JTTP for Peace Operations" (PC), addresses the MNFC's personal, military, and civilian staff.

Joint Force Commander's Staff Processes. The concepts of **flattening** and **reachback** are not covered and **span of control** is referenced once in draft publications. JP 3-11, "Joint Doctrine for Nuclear, Biological, and Chemical (NBC) Defense Operations" (second draft (SD)), provides a summary of the **collaborative planning** process at the combatant command and JTF levels. JP 3-35 (PC) provides formats for **writing deployment and redeployment orders** and force tracking is

guidance on collaborative planning, writing orders, COA development and analysis, and the commander's estimate process.

associated with **information management**. Meteorological and oceanographic support, engineer support, and the application of electronic warfare resources are addressed in the context of **COA development and analysis**. JP 5-00.1 (PC) discusses the theater **commander's estimate** of the situation process. It includes guidance on staff estimates, estimate process, analysis of the situation, COA analysis, COA analysis and comparison, COA selection, and format for commander's estimate of the situation. Draft publications also do not address **information fidelity** as a concept, but discuss the importance of timely and accurate information.

Organizing operational areas (e.g., amphibious objective area) for forcible entry operations is discussed and an illustration is provided.

Organization of the Theater, Area, or Battlespace (Operational Areas). JP 3-18 (PC) devotes a major paragraph to organization of forcible entry operations area. Guidance regarding the area of operations, amphibious objective area, joint special operations area, and airspace control area is provided. Figure II-3 illustrates a notional joint forcible entry operations area.

Efficient, integrated C4 systems are key to counterair operations, sealift.

Command and Control Systems (Information Systems). Draft publications explain that effective, integrated C4 systems are required for counterair operations and sealift.

There is a large amount of doctrine under development in draft publications on C2 of coalitions, interagency coordination, the interface of civil authorities with JFCs, and C2 during military operations other than war (MOOTW).

JP 3-16 (FC) contains guidance on **C2 of coalitions** and provides a major paragraph on coalition command structures. JP 3-07.6, "JTTP for Foreign Humanitarian Assistance" (PC), contains a major paragraph on **interagency coordination** and relationships with NGOs, PVOs, and international organizations. The **interface of civil command structures with JFCs** is discussed in JP 3-07.7, "JTTP for Domestic Support Operations" (PC). It describes the C2 process; C2 for military support to civilian authorities; and provides figures illustrating C2 relationships during animal and plant disease emergencies, wildfire emergencies, radiological emergencies, mass immigration emergencies, and military assistance for civil disturbance. **C2 and nontraditional/ asymmetric operations (MOOTW)**

are addressed in three draft publications. JP 3-07.3 (FC) provides C2 guidance in general and specifically for peacekeeping and peace enforcement. JP 3-07.6 (FC) contains guidance on coordination and relationships with NGOs, PVOs, and international organizations; JTF and JTF staff organization, CMOC, humanitarian operations center (HOC), JTF level coordination, C2 planning, and liaison. **Database management** is not addressed, but JP 3-35 (PC) provides a **definition of COP**.

OTHER DOCUMENTATION

The Navy and Marine Corps have developed Service doctrine that addresses the art and science of C2. The Air Force has some C2 guidance in approved Service publications and is developing a C2 publication. The Army uses the C2 guidance contained in FM 101-5, "Staff Organization and Operation."

C2 Description and Theory

Air Force Doctrine Document (AFDD) 1, "Air Force Basic Doctrine," provides a short overview consisting of two large paragraphs on C2 from the airman's perspective. **AFDD 28, "Command and Control,"** is under development.

Naval Doctrine Publication (NDP) 6, "Naval Command and Control," provides a thorough discussion of the principles of C2. Command and control is described as "an essential element of the art and science of naval warfare." Chapter 1 provides the overarching concepts of C2, with a section entitled "What is Command and Control?" Chapter 2 covers the processes of C2. Specifically, this chapter contains discussion on the decision and execution cycle, decisionmaking theory, and methods of control. Chapter 3 looks at the naval C2 system. Specifically, this chapter covers organizing for C2 and the role of information in C2. Finally, chapter four covers recommendations for building effective C2 with some discussion on fundamentals of effective C2 and C2 in the age of the information revolution.

Army's FM 101-5, "Staff Organization and Operation," provides discussion on the art and science nature of C2. It defines C2 as "an essential element of the art and science of warfare."

Marine Corps Doctrine Publication (MCDP) 6, "Command and Control," provides a detailed and

expansive discussion on the topic of C2. MCDP 6 begins in Chapter 1 with a discussion on the nature and importance of C2. MCDP 6 defines C2 and describes the relationship between the two such that “command as the exercise of authority and control as feedback about the effects of the action taken.” Chapter 1 goes on further to describe the impact the information age is having on C2 in military operations. Chapter 2 opens the discussion looking at the decision making process. Col Boyd’s model of Observe, Orient, Decide, and Act is used. Chapter 2 also has a discussion of the “information hierarchy.”

CJCS directives address developing commander’s critical information requirements.

JFC C2 tasks that have a relationship to decisionmaking described in CJCS directives include development of commander’s critical information requirements (CCIRs) and control of reconnaissance and C4 operations.

Common Operational Picture (COP) reporting requirements, data management, and architecture is provided in a CJCS directive.

CJCSI 3151.01, “Global Command and Control System **Common Operational Picture** Reporting Requirements,” is a 59 page document that includes guidance on reporting requirements, information flow and data management, and the COP operational architecture.

Operation plan development, COA development, and selection is addressed in a CJCS directives.

CJCSM 3122.03, “Joint Operation Planning and Execution System Volume II Planning Formats And Guidance,” provides detailed formats and guidance for **developing OPLANs**, concept plans (CONPLAN) and functional plans, and associated annexes. CJCSM 3122.02, “Crisis Action Time-Phased Force and Deployment Data Development and Deployment Execution,” has an enclosure on **COA development** and another has very general guidance on COA selection.

CJCS directives establish some guidance on database management by introducing track database managers and GCCS database administrators.

Select CJCS directives provide limited guidance on database management. Examples include:

The **track database managers** must be knowledgeable of the entire COP system operation. A close partnership between the track manager and systems administrator must exist to maintain an effective and accurate COP.

The **GCCS Database Administrator** is responsible for the day-to-day operations of the databases located at the GCCS site.

CJCS directives define the terms “COP” and “common tactical picture.”.

Two CJCS directives provide **definitions for COP and common tactical picture.**

ANALYSIS RESULTS

At least 18 approved and four draft joint publications contain a chapter devoted to C2. Some joint publications such as JPs 6-0 and 5-00.2 were developed or are being developed to address unique C2 issues.

Quantity. Currently, there are at least 18 approved and four draft joint publications that contain an entire chapter devoted to C2, command relationships, or joint force/staff organization. Prominent among those are JP 0-2, which could be considered the joint community’s C2 centerpiece, and JP 5-00.2, the JTF centerpiece. Additionally, four approved and one draft joint publication were designed to address unique C2 issues. Prominent among those are JP 6-0, which addresses C4 systems support, and JP 3-16 (FC), which discusses the unique aspects of C2 in a multinational environment.

Basic C2 definitions and tenets are adequately covered in joint publications. Three of the four Services are developing a separate C2 publication and they generally address the same definitions and tenets as joint publications. Although not labeled as such, the joint operation planning process could be considered a “decisionmaking model.” Likewise, the notion of establishing a joint force with a JFC and components could be considered a “warfighting model.”

C2 Description and Theory. The **basic definitions and tenets of C2** are covered primarily in JPs 0-2, 1, 1-02, “DOD Dictionary of Military and Associated Terms,” and 3-0; and packaged in chapters, sections, or major paragraphs for easy reference. They clearly articulate the definitions and elements of command, control, and C2. Three of the four Services (Navy, Marine Corps, Air Force) have or are developing **Service C2 publications.** Generally, they address the same tenets as those found in joint publications. Joint publications do not label any doctrine as a **“C2 decisionmaking model.”** However, the joint operation planning process for both deliberate and crisis-action planning could be considered a decisionmaking model since a COA is ultimately selected. Likewise, joint publications do not label any doctrine as a **“warfighting model.”** However, joint doctrine essentially describes our warfighting model as the establishment of a joint force with a JFC to ensure unity of effort and components to execute the commander’s intent or mission-type orders.

Joint publications adequately address the theater-level architecture of staff functions like intelligence and others such as air C2.

Numerous C2 nodes like the joint operations center and joint search and rescue center are thoroughly described.

Joint doctrine recognizes the JFC must synchronize the efforts of joint force components and capabilities and the resulting actions are often based on the JFC's desired effects. .

Basic command relationships are thoroughly discussed in key publications and applied in most of the others. Depending on the publication's subject, discussion of command relationships range from a focus on the strategic level to multinational concepts like foreign OPCON.

Theater/JFC-level C2. The **theater-level structure (architecture)** for intelligence, logistics, special operations, air C2, airspace control, air defense, air-ground system, and potential multinational structures are thoroughly described. A host of activities described in joint publications, along with CJCS directives could qualify as **C2 tasks that relate to decisionmaking**. Examples are JIPB, COA development, execution of the targeting/air tasking order cycle, developing CCIRs, time-phased force and deployment data development and modification, gathering battle damage assessments, and designing a C4 system. **Alternate C2 nodes** such as liaison teams/elements, operations centers, the JSRC, and the JFE are abundant and thoroughly described in joint publications. Joint doctrine recognizes that the **JFC/MNFC must synchronize the efforts of air, land, sea, space, and special operations forces** by developing integrated campaign/operation plans, synchronizing maneuver and interdiction, establishing priorities, coordinating with nonmilitary organizations, and establishing command relationships. The basic doctrine for C2 of **transient forces en route** to their theater of operations is addressed in JP 0-2. A few other joint publications add some subject-unique guidance, as required. The concept of "**effects-based operations**" is not addressed separately in joint publications. However, it is very common to find guidance about determining and assessing the desired effects of fires or maneuver.

Command Relationships. Joint doctrine on **basic command relationships** (COCOM, OPCON, TACON, and support) and their application is very complete and included in nearly every publication. Some focus on **command relationships at the strategic level** by addressing the unique aspects associated with special operations or common-user airlift. Others identify the **operational-level applications** of OPCON, TACON, and support relationships to situations where a JFACC, SOF, rear area units, airlift forces, CSAR elements, etc., are employed. JP 3-16 (FC) addresses

The fundamental organizational structures and options and considerations for applying them are thoroughly addressed, primarily in JPs 0-2 and 3-16 (FC). Other publications build on their foundation, for example, by describing the justifying elements for establishing functional components.

Joint publications like JP 5-00.2 contain very detailed and exhaustive guidance on organizational principles and options for the JFC's staff. Others focus on a specific portion of the staff like the IO cell or a special situation such as integrating multinational force members.

The processes of collaborative planning (JOPES); development of staff estimates, COAs, and the commander's estimate; and writing orders are well documented in joint publications and CJCS

multinational command relationships like foreign OPCON and retention of the National chain-of-command.

Organization of Joint Forces. JP 0-2 addresses **basic organizational structures and principles** in depth. The authority to establish and organizational options for unified, specified, sub-unified, JTFs, and component structures are addressed. The authority and considerations surrounding **dual-hatting** the CJTF as a component commander also are addressed. Other joint publications build on that foundation by addressing items ranging from the building blocks of a JTF headquarters to the justifying elements for functional components. JP 3-16 (FC) vigorously addresses the **establishment and organizational options of a multinational force** in terms of alliances, coalitions, and liaison and coordination structures.

Organization of the JFC's Staff. Organizational principles, criteria, and the functions and responsibilities of each principal staff officer; the commander's personal staff and special staff; and associated boards, centers, and cells are described in detail. The guidance in JP 5-00.2 includes organizational charts and checklists to assist the respective principal staff officer in fulfilling assigned responsibilities. More specialized guidance can be obtained in other joint publications. Examples include JP 4-0 on the functions and organization of the J-4 and logistics centers and boards and JP 3-13 on the IO cell. JPs 5-00.2 and 3-16 (FC) contain general guidance on integrating multinational force members into the JFC's staff.

JFC's Staff Processes. JOPES is not labeled as a **collaborative planning** process, but the associated steps and actions, as described in JP 5-0, require the joint force headquarters collaborate with subordinate and superior commanders and staffs. JP 5-00.2 provides a detailed illustration of the collaborative planning process at the combatant command and JTF levels. The **commander's estimate process to include staff estimates and COA development,**

directives. The associated boards, centers, cells, and elements to carry out various other staff functions are also documented throughout joint publications. Other staff processes and concepts like information management, span of control, reachback, flattening, and information fidelity are briefly mentioned or not established in joint publications.

analysis, and selection is well documented in JPs 3-0, 5-0, 5-00.1 (PC), and 5-00.2. Instructions and guidance for **writing orders** is addressed in several joint publications by providing OPORD, OPORD annex, or related orders (deployment/redeployment) formats. Cancelled JP 5-0 series publications that specifically addressed writing orders have been or are being converted (e.g., JP 5-03.3) to CJCSMs. Consequently, the most comprehensive formats and guidance on OPLANs, CONPLANs, functional plans, and associated annexes is located in CJCSM 3122.03, "Joint Operation Planning and Execution System Volume II Planning Formats and Guidance." **Information management** is primarily associated with specific information systems or JOPES information management tools. There is very little guidance related to establishing an umbrella process to identify, request, receive, track, and disseminate information. The most comprehensive outline of **boards, centers, cells, and elements** is in the keystone publications and JP 5-00.2, which provides a separate paragraph for each type, describing the makeup and functions. Other publications address specialized organizations (e.g., IO cell, JSRC). The concepts of "**span of control**," and "**reachback**" are mentioned as factors to consider, but not developed as significant joint doctrine principles. It is recognized that the J-2 needs a reachback capability to draw on the intelligence resources outside the joint force. **Flattening** or reducing the proliferation of staffs and staff sizes is not discussed in approved or draft joint publications. **Information fidelity** is not a label for a joint doctrine concept, but the importance of obtaining accurate and timely information is a theme throughout joint publications.

Guidance on organization of the operational area is provided in several joint publications.

Organization of the "Theater" "Area" or "Battlespace" (Operational Area). General guidance on organizing the operational area is contained in JP 3-0 and other publications focus on specialized areas such as the JSOA, JRA, or AOA.

Various C4 systems that process information in support of C2 are described in the JP 6-0

C2 Systems (Information Systems). Numerous systems that process information are described. The primary sources are JP 6-0 series publications, however, several others address subject-unique

series and other joint publications. Weapons systems C2 systems are not addressed. C2 tools like video teleconferencing and command directives like a fragmentary order are mentioned in a few joint publications.

The vast majority of joint publications address multinational considerations for C2 and a few focus on coalition situations.

JP 3-08 provides the fundamental guidance for interagency coordination and other joint publications adapt it for subject-unique situations like foreign humanitarian assistance.

The interface of JFCs with civilian authorities is found primarily in developing JTTP (JP 3-07.7, "JTTP for Domestic Support Operations," (PC)).

The JP 3-07 series publications thoroughly address the various so-called "asymmetric operations," labeled as

information systems. The focus is on C4 systems and **weapons systems C2 systems** or an attempt to point out that C2 systems are separate and distinct from a weapons system's C2 system are not addressed. Further, **C2 tools** (VTC, Home Page) used to push or pull information and authoritative directives (e.g., fragmentary order) are mentioned separately in a few joint publications.

Multinational C2 Considerations. The vast majority of approved and draft publications cover multinational considerations regarding organization, command relationships, or publication-specific subjects (e.g., intelligence architecture, C4 system support, SOF command relationships, and counterair threats dissemination). JPs 3-0 and 3-16 (FC) make a special effort to outline the unique considerations for operating in a **coalition environment**.

Interagency Coordination. JP 3-08 was designed to provide guidance on interagency coordination from the theater to JTF level. This two-volume publication thoroughly addresses all aspects of coordination with government, NGO, PVO, and other organizations. Others repeat or expand on the basic doctrine for unique situations such as foreign humanitarian assistance.

Interface of Civil Command Structure with JFCs. Developing JTTP on domestic support operations in JP 3-07.7 (PC) is the primary source for guidance regarding the interface of military commanders and organizations with civil authorities. A comprehensive list of civil authorities and their functions and an explanation of command relationships during various types of domestic emergencies is provided.

C2 During Asymmetric Operations (MOOTW). Each publication in the JP 3-07 series has specific guidance tailored to the subject area (e.g., counterdrug, noncombatant evacuation operations, foreign humanitarian assistance, etc.). The C2

MOOTW in joint publications.

topics of organization and command relationships seem to be thoroughly covered and numerous figures are provided for clarification.

CONCLUSIONS

Discussions on C2 and related subjects are available in nearly every joint publication.

Command and control and C2-related subjects are discussed in nearly every joint publication. Fundamental C2 subject areas are common to several joint publications. C2 concepts and principles are tailored to serve each joint publication's purpose.

Key joint publications like JP 0-2 are primary references for C2 doctrine.

There are key joint publications (JPs 0-2, 3-0, 6-0, 5-00.2, JP 3-56.1, 3-08 Vol I, 3-16 (FC)) that serve as primary references for C2 guidance.

Most of the C2 Working Group subjects are adequately covered in joint publications, however, some are under a different label, others are not discussed or lightly addressed, and a few are detailed in CJCS directives. Two of the Service C2 publications address the subject areas.

Most of the C2 Working Group subject areas listed in Appendix B are adequately addressed in joint publications (e.g., command relationships). Some are addressed in joint publications under a different label (e.g., JOPES as a decisionmaking model). Others are not covered or are very lightly addressed in joint publications (e.g., flattening, span of control) and a few are addressed in more detail in CJCS directives than in joint publications (e.g., writing orders). The subjects addressed in Navy and Marine Corps C2 publications seem to parallel those suggested by the C2 Working Group.

The development of a joint C2 publication has failed before, will be time consuming, lack depth, and tailored C2 guidance for specific situations will remain as a requirement in other joint publications.

The development of a separate joint publication on C2 has failed before and will require more time and effort than modification of an existing joint publication(s). One joint publication will not be comprehensive enough to address all aspects of C2 in every situation. Tailored C2 guidance in other joint publications for each type of operation or activity will still be required.

JP 0-2 could be revised to provide a more comprehensive C2 foundation.

JP 0-2 could be expanded, modified, and strengthened to serve as a more comprehensive foundation for subordinate joint publications. It is the most likely publication to be used as a reference.

RECOMMENDATIONS

1. *Reject development of a joint C2 publication.*
 2. *Revise and expand Chapter III in JP 0-2 to include more doctrine on the fundamentals of C2 while retaining existing information on command relationships and change the title to "Fundamentals of Joint Force Command and Control."*
 3. *Strengthen and expand Chapter IV in JP 0-2 to include more guidance on joint force organization and structures while retaining the existing guidance on the commander, staff, and components; and change the title to "Fundamentals of Joint Force Organization."*
1. Reject proposals to develop a separate joint C2 publication.
 2. Revise and expand Chapter III, "Command Relationships," in JP 0-2 to include new or expanded guidance on basic C2 theory and tenets, the JFC's role, C2 considerations for multiple contingencies in one AOR, decisionmaking and collaborative planning, information management, written and verbal orders, common operational picture, span of control, reachback, the role of (C4) information systems, interagency coordination, civil-military relationships, and multinational force C2 considerations.
 - a. Retain the existing guidance on command relationships and revise to include expanded discussion of direct and general support, and clarification of positioning authority under OPCON, TACON, and support relationships.
 - b. Change the title to "Fundamentals of Joint Force Command and Control."
 3. Strengthen and expand Chapter IV, "Doctrine and Policy for Joint Commands," in JP 0-2 to include basic, general guidance and information on joint force organization elements; the theater-level C2 structure; joint force staff organization options, C2 nodes such as boards, centers, cells, elements, liaison organizations, and interagency coordination organizations; and multinational force structures and staff integration.
 - a. Retain, or revise accordingly, the existing guidance on the policy and authority for establishing joint commands; the commander, staff, and components of a joint force; and discipline and personnel administration.
 - b. Change the title of Chapter IV to "Fundamentals of Joint Force Organization."

CHAPTER I

INTRODUCTION

SECTION A: PURPOSE

This report provides study results, analysis, and conclusions concerning the availability and adequacy of approved joint doctrine on command and control (C2) requested by the co-chair (J38/DSOD, Joint Staff) of the C2 Doctrine Working Group (Appendix A) and the Chief of the Doctrine Division from the USACOM Joint Warfighting Center (JWFC). The report also provides recommendations regarding the development of a single comprehensive joint C2 publication.

SECTION B: METHODOLOGY

A systematic approach to the study was applied. Pertinent data was gathered and analyzed with reference to the subject areas identified during the C2 Doctrine Working Group (Appendix B). Then, conclusions were drawn and recommendations were made based on the data and analysis results.

SECTION C: DATA COLLECTION

1. Research

- a. The Joint Electronic Library (JEL) was searched to identify approved and draft joint doctrine and Chairman of the Joint Chiefs of Staff (CJCS) Instructions and Manuals relevant to this study. Approved terms and definitions associated with the search are included in the Glossary.
- b. Service doctrine on C2 was reviewed.

2. **Analysis, Conclusions, and Recommendations.** The analysis centered around the availability and coverage in joint publications of the C2 subject areas (Appendix B) derived during the December 1998 C2 Doctrine Working Group. Service doctrine also was reviewed for coverage of the C2 subject areas. Approved and draft joint doctrine and joint tactics, techniques, and procedures (JTTP) on C2 was assessed for adequacy. Conclusions were drawn regarding the effectiveness of approved and draft joint doctrine and JTTP to address those C2 subject areas. Finally, recommendations were made regarding the impact of strengthening joint doctrine or developing a separate C2 publication.

SECTION D: ADMINISTRATIVE

Questions concerning this study may be addressed to the USACOM JWFC using the mailing address below or by telephone at DSN 680-6111/6406, Comm (757)726-6111/6406, or FAX 680-6552.

USACOM Joint Warfighting Center
Doctrine Division
380 Fenwick Road, Bldg 96
Fort Monroe, VA 23651-1064

CHAPTER II

DATA SUMMARIES

“The primary emphasis in command relations should be to keep the chain of command short and simple so that it is clear who is in charge of what. Unity of command is the guiding principle of war in military command relationships. Experience shows liaison is a particularly important part of command, The importance of an efficient joint force command structure cannot be overstated.”

JP 1, “Joint Warfare of the Armed Forces of the United States”

SECTION A: APPROVED JOINT DOCTRINE

Excerpts from approved joint doctrine are provided to illustrate fundamental principles and provide definitions pertinent to this study. Highlighting with **bold type** is used to emphasize key sentences and/or phrases and does not duplicate that which may appear in the referenced joint publication. Hyperlinks to the referenced subjects are highlighted in blue in the PDF format (Note: compact disc reader and Adobe Acrobat software required).

1. **General.** JPs 0-2, “Unified Action Armed Forces,” 1-0, “Doctrine for Personnel Support to Joint Operations,” 2-0, “Joint Doctrine for Intelligence Support to Operations,” 3-01.5, “Doctrine for Joint Theater Missile Defense,” 3-05, “Doctrine for Joint Special Operations,” 3-07.3, “JTTP for Peace Operations,” 3-07.4, “Joint Counterdrug Operations,” 3-07.5, “JTTP for Noncombatant Evacuation Operations,” 3-09.3, “JTTP for Close Air Support,” 3-10, “Joint Doctrine for Rear Area Operations,” 3-10.1, “JTTP for Base Defense,” 3-13, “Joint Doctrine for Information Operations,” 3-17, “JTTP for Theater Airlift Operations,” 3-50.2, “Doctrine for Joint Combat Search and Rescue,” 3-52, “Doctrine for Joint Airspace Control in the Combat Zone,” 3-53, “Doctrine for Joint Psychological Operations,” 3-57, “Doctrine for Joint Civil Affairs,” 4-0, “Doctrine for Logistic Support of Joint Operations,” and 5-00.2, “Joint Task Force Planning Guidance and Procedures,” all devote at least a chapter to command and control or a related subject such as organization or command relationships. Publications such as JPs 3-08, “Interagency Coordination During Joint Operations Vol I,” 3-13.1, “Joint Doctrine for Command and Control (C2) Warfare,” 3-56.1, “Command and Control of Joint Air Operations,” and 6-0, “Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations,” were designed to address specific C2 issues. The following paragraphs outline some of the key principles contained in them and significant portions of other JPs.

2. Command and Control Description and Theory

a. **Basic Definitions.** There are 45 pages of approved definitions associated with command and control in JP 1-02, "Draft of DOD Dictionary of Military and Associated Terms, by Category." Some key definitions are provided below.

(1) "**command**—1. The authority that a commander in the Armed Forces lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organizing, directing, coordinating, and controlling military forces for the accomplishment of assigned missions. It also includes responsibility for health, welfare, morale, and discipline of assigned personnel. . . ."¹

(2) "**control**—1. Authority which may be less than full command exercised by a commander over part of the activities of subordinate or other organizations. . . ."²

(3) "**command and control**—The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission."³

(4) "**command and control system**—The facilities, equipment, communications, procedures, and personnel essential to a commander for planning, directing, and controlling operations of assigned forces pursuant to the missions assigned."⁴

b. **Basic Tenets**

(1) **JP 0-2** describes **command as: "central to all military action, and unity of command is central to unity of effort.** Inherent in command . . . is the authority that a military commander lawfully exercises over subordinates and confers authority to assign missions and to demand accountability for their attainment. Although commanders may delegate authority to accomplish missions, they may not absolve themselves of the responsibility for the attainment of these missions. Authority is never absolute; the extent of authority is specified by the establishing authority, directives, and law (see Figure III-1)."⁵ Figure III-1 illustrates the chain of command and control from the National Command Authorities to the Services and combatant commanders down to joint task force (JTF) components. JP 0-2 stresses that "Sound organization

should provide for unity of effort, **centralized planning, and decentralized execution.**”

(2) **JP 3-0, “Doctrine for Joint Operations,”** contains, in Chapter II, a major paragraph on command and control (C2). It discusses the nature of C2, elements of command, elements of control, purpose of control, tools for implementing command decisions (communications, computers, and intelligence), and the importance of liaison to joint force C2. JP 3-0 also lists unity of command as a principle of war. Some excerpts are:

(a) “**Command** at all levels is the art of motivating and directing people and organizations into action to accomplish missions.”⁶

(b) “**Control** is inherent in command. To control is to regulate forces and functions to execute the commander’s intent.”⁷

(c) “The related tools for implementing command decisions include **communications, computers, and intelligence.** Space-based systems provide commanders capabilities such as **surveillance, navigation, and location** that greatly facilitate command.”⁸

(d) “**Liaison** is an important aspect of joint force C2. Liaison teams or individuals may be dispatched from higher to lower, lower to higher, laterally, or any combination of these. They generally represent the interests of the sending commander to the receiving commander, but can greatly promote understanding of the commander’s intent at both the sending and receiving headquarters.”⁹

(e) “JFCs [joint force commander] issue **prioritized mission-type orders** to subordinate commanders and **define command relationships** to facilitate mission accomplishment consistent with their concept of operations.”¹⁰

(f) “The purpose of **unity of command** is to ensure unity of effort under one responsible commander for every objective. Unity of command means that all forces operate under a single commander with the requisite authority to direct all forces employed in pursuit of a common purpose. Unity of effort, however, requires coordination and cooperation among all forces toward a commonly recognized objective, although they are not necessarily part of the same command structure. In multinational and interagency operations, unity of command may not be possible, but the requirement for unity of effort becomes paramount. Unity of effort—coordination through cooperation and common interests— is an essential complement to unity of command.”¹¹

(3) **JP 1, “Joint Warfare of the Armed Forces of the United States,”** contains a lengthy section (2 pages) in Chapter III, “Fundamentals of Joint Warfare,” about the exercise of command. Examples of the guidance are provided below:

(a) **“American military power is employed under joint force commanders.”**¹²

(b) “The primary emphasis in command relations should be to keep the chain of command short and simple so that it is clear who is in charge of what. **Unity of command** is the guiding principle of war in military command relationships.”¹³

(c) “A clearly understood aim (**commander’s intent**) enables subordinates to exercise initiative and flexibility while pursuing the commander’s goals and priorities. Joint force commanders should scrupulously avoid overly detailed management and direction. Simple orders with the intent of the commander clearly articulated comprise the best basis for clear and effective communications between and among all elements of the joint force.”¹⁴

(d) **“Component commanders** are first expected to orchestrate the activity of their own forces, branches, and warfare communities— itself a demanding task. In addition, effective component commanders understand how their own pieces fit into the overall design and best support the joint force commander’s plans and goals. Component commanders also should understand how they can support and be supported by their fellow component commanders. Leaders who possess this extra dimension of professionalism have the potential to become great component commanders.”¹⁵

(4) **“The CJTF** [commander, joint task force] is responsible for determining the basis on which JTF component and subordinate task force commanders will exercise C2 and for clearly assigning responsibilities, authorities, and command relationships.”¹⁶

(5) **“Liaison** personnel should be established between the JTF HQ [headquarters] and higher commands, between adjacent units, and between supporting, attached, and assigned forces and the JTF HQ.”¹⁷

(6) “Airlift C2 is based on the principle of centralized control and decentralized execution. Through **centralized control**, commanders provide guidance and organization to the airlift effort. **Decentralized execution** provides flexibility for subordinate commanders to use initiative in accomplishing their missions.”¹⁸

(7) “**Unity of effort** is as essential for the forces in the JRA [joint rear area] as it is for the combat forces. Clear-cut procedures for authority and responsibility must be established for the successful execution of missions by the units and activities in the JRA and for the security and survival of the bases housing those units and activities. These activities may involve interaction with host-nation noncombatants, United Nations personnel, nongovernmental organizations, and private voluntary organizations.”¹⁹

(8) “Use of **mission type orders** is the preferred method for tasking one component to conduct the CSAR [combat search and rescue] mission for another component or to support another component’s CSAR operation. Use of mission type orders allows the commander(s) executing these supporting CSAR missions the greatest possible operational latitude and flexibility.”²⁰

c. **C2 Decisionmaking Model [Process]**

(1) “**Joint operation planning** employs an integrated process entailing similar policies and procedures during war and military operations other than war, providing for orderly and coordinated problem solving and decisionmaking. In its peacetime application, the process is highly structured to support the thorough and fully coordinated development of deliberate plans. In crisis, the 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.”²¹

(2) Appendix A, “The Decision Cycle,” in JP 3-13.1 provides a “decision model . . . based upon the Observe, Orient, Decide, and Act loop.”²² Explanations for each step are provided.

d. **Warfighting Model**. No direct references were discovered.

3. **Theater/JFC-level C2**

a. **Relationship of C2 Decisionmaking model to JFC’s C2 Tasks**

(1) “**The intelligence cycle** focuses on the commander’s mission and concept of operation. Each phase of the cycle must be synchronized with the commander’s decision making and operational requirements to successfully influence the outcome of the operation.”²³

(2) “The requester must integrate all intelligence obtained from national, theater, or organic resources and/or assets into the decision making and

planning processes. The subordinate joint force J-2 is responsible for this integration process, updating the situation assessment and advising the JFC on any changes to the COA [course of action] available to the adversary.”²⁴

(3) “**joint intelligence preparation of the battlespace.** The analytical process used by joint intelligence organizations to produce intelligence assessments, estimates and other intelligence products in support of the joint force commander’s decision making process.”²⁵

(4) “**priority intelligence requirements.** Those intelligence requirements for which a commander has an anticipated and stated priority in his task of planning and decisionmaking.”²⁶

(5) “Targeting is complicated by the requirement to deconflict duplicative targeting by different forces or different echelons within the same force and to synchronize the attack of those targets with other components of the joint force. An effective and efficient target development process and air tasking cycle are essential for the JFACC [joint force air component commander]/JFC staff to plan and execute joint air operations.”²⁷

(6) “**Vertical and lateral integration** of control mechanisms is often confusing in the interagency process. . . **Decision making** at the lowest levels is frequently thwarted because field coordinators may not be vested with the authority to speak for their agencies, departments, or organizations.”²⁸

(7) “Senior leaders need to be briefed on the policies and laws governing RC [Reserve Component] activation. RC mobilization and deployment policies need to be interpreted and may need modification to satisfy the requirements of a crisis. **Decision packages** need to be prepared which begin with a request (normally by the supported CINC [commander in chief], but which may be made by a Service, supporting CINC, or the Joint Staff, to callup RC forces).”²⁹

b. **Theater-level C2 Structure**

(1) JP 2-0 dedicates an entire chapter (VII) to “the joint intelligence architecture.” Specifically, paragraph 3 of Chapter VII addresses an overview description, principles, and requirements. Some excerpts are:

(a) “The joint intelligence architecture provides the means to interconnect collectors, producers, and customers in an information network. . . The joint intelligence architecture is configured to provide access to all intelligence sources from anywhere on the globe and to provide the baseline data that JFCs will need to support joint

operations. This architecture conceptually describes equipment capabilities, information flow requirements, and responsibilities.”³⁰

(b) “Intelligence systems, concepts, products, and language must be sufficiently interoperable for the exchange and use of data in any form and from any source among intelligence organizations and operating commands and forces.”³¹

(c) “The joint architecture that provides the infrastructure for intelligence support is not hierarchical. Formal command and control relationships, however, exist as shown in Figure VII-2. This relationship facilitates RFI [request for information] management and optimizes complementary intelligence functions by echelon without obstructing the timely flow of critical intelligence up, down, or laterally. The national agencies maintain systems and organizations that respond directly, and provide intelligence, to any echelon for time-sensitive reporting (i.e., the TRAP [tactical recovery of aircraft and personnel] broadcast). The formal flow for intelligence RFI up and down echelons is through the NMJIC [National Military Joint Intelligence Center].”³²

(d) “Figure VII-3 depicts the joint intelligence architecture as a network of integrated work stations, file servers, and communications links. These three elements must work together, compliant with common standards, to create the interoperable information environment required to support military operations.”³³

(2) JP 4-0 provides some unique guidance on C2 of logistics. Some excerpts are:

(a) “Unity of command is essential to coordinate national and theater logistic operations. Logistics is a function of command. To exercise control at the strategic, operational, and tactical levels of war, commanders must also exercise control over logistics. For a given area and for a given mission, a single command authority should be responsible for logistics.”³⁴

(b) “To influence the relative combat power of his force, the commander must have adequate control of the command’s logistic support capability.”³⁵

(3) JP 3-05 devotes Chapter III, “Organization and Command and Control,” to describing, among other subjects, theater-level special operations forces (SOF) C2, and SOF operational control. Some excerpts are:

(a) **“The identification of a C2 organizational structure for SOF** should depend upon specific objectives, security requirements, and the operational environment. C2 of SOF is executed through one or more of the following. . . **Joint Force Special Operations Component Commander (JFSOCC). . . Joint Special Operations Task Force [JSOTF].** . . A JSOTF is a temporary joint SOF headquarters established to control SOF of more than one Service in a specific theater of operations or to accomplish a specific mission.”³⁶

(b) “SOF may be under the OPCON [operational control] or TACON [tactical control] or in support of Service or functional component commanders. Specific command arrangements should be determined by the nature of the mission and the objectives to be accomplished. (e.g., NSW [naval special warfare] forces assigned in support of Navy component and/ or fleet commander). The most important consideration is to maintain as intact the SOF chain of command so the gaining commander can have available appropriate levels of command and control for the assigned or attached SOF forces. Commanders at all levels should ensure that SOF are employed within existing capabilities and that support arrangements allow for administrative and SOF-peculiar logistic requirements.”³⁷

(4) JP 3-09, “Doctrine for Joint Fire Support,” contains a figure that illustrates in detail the theater air ground system coordination links.

(5) JP 3-17 devotes a major paragraph in Chapter II, “Command and Control,” to the theater air control system. Subparagraphs discuss the control and reporting center, tactical air control party, wing operations center, tanker airlift control element, mission support team, combat control team, theater airlift liaison officers, airborne elements, and the Director of Mobility Forces. Additional guidance includes:

(a) “Within the JAOC, an airlift coordination cell (ALCC) plans, coordinates, and manages the execution of theater airlift operations.”³⁸

(b) “Normally, the ALCC will consist of an airlift plans branch, an airlift operations branch, and an airlift support branch.”³⁹

(6) JP 5-00.2 was developed to “provides fundamental guidance and procedures for the formation . . . of a joint task force to command and control joint operations throughout the range of military operations.”⁴⁰ Its theme is command and control, but this subject is specifically addressed in Chapter IV, “Joint Task Force Command and Control.” Expanded guidance is provided on specialized JTF assignments; and

multinational C2 considerations. Some examples of the guidance provided include:

(a) “Assignment of specialized coordination and control functions and responsibilities such as ACA [airspace coordination agency], AADC [area air defense commander], and joint rear area coordinator (JRAC), if used, should be made as early as practical in the planning cycle.”⁴¹

(b) **“Coalitions are most often characterized by one of two basic structures: parallel command or lead-nation command. . .**

Parallel command exists when nations retain control of their deployed forces. This is the simplest multinational C2 structure to establish and allows coalition forces to control operations through existing national chains of command. It must be stressed, however, that even though it may satisfy national requirements for command over their own forces, such an arrangement can hamper operations in that it violates the doctrinal principle of unity of command. Therefore, it should be avoided whenever possible. . . In lead-nation command, the nation providing the preponderance of forces and resources typically provides the commander of the coalition force. The lead nation can retain its organic C2 structure, employing other national forces as subordinate formations.”⁴²

(7) **“The JFC designates the ACA.** The broad responsibilities of the ACA include coordinating and integrating the use of the airspace control area. Subject to the authority and approval of the JFC, the ACA develops broad policies and procedures for airspace control and for the coordination required among units within the AOR [area of responsibility]/JOA [joint operations area]. The ACA establishes an airspace control system that is responsive to the needs of the JFC, provides for integration of the airspace control system with that of the host nation, and coordinates and deconflicts user requirements. The ACA develops the ACP [air control plan] and, after JFC approval, promulgates it throughout the AOR/JOA.”⁴³

(8) **Common Operational Picture (COP).** **“The Global Command and Control System (GCCS)** . . . establishes interoperability among forces with a focus on providing a common operational picture to support situations awareness to the joint warfighter.”⁴⁴

c. **Alternate to Chain of Command/C2 Nodes**

(1) JP 5-00.2 contains a major paragraph on centers, boards, and cells. Some excerpts are:

(a) “The CJTF may organize a JOC [joint operations center] to serve as a focal point for all operational matters and, in the absence of a JISE [joint intelligence support element], intelligence matters.”⁴⁵

(b) “The CJTF should establish a JSRC [joint search and rescue center] or its functional equivalent in the earliest stages of forming a JTF. A JSRC may be established by the CJTF under the cognizance of the JTF staff (normally the J-3), or the CJTF may assign the responsibility to one of the component commanders.”⁴⁶

(c) “The CJTF may approve the formation within the JTF J-3 of a joint fires element (JFE). The JFE is an optional staff element that provides recommendations to the JTF J-3 to accomplish fires planning and coordination. The JFE assists the JTF J-3 to accomplish responsibilities and tasks as a staff advisor to the JFC. Specific duties are assigned by the JTF J-3 with approval by the CJTF. When established, this element would be composed of a variety of experts from the CJTF’s staff (including the J-3’s staff), the components, the combatant command, and elsewhere as needed. The JFE provides the capability to accomplish fires planning and coordination functions.”⁴⁷

(2) JP 5-00.2 contains an entire section on “JTF Liaison Personnel.” It contains guidance on liaison requirements and functions and a checklist for liaison personnel. Some excerpts are:

(a) “The CJTF must determine what staff officer or staff section will have overall cognizance of all liaison personnel reporting to the JTF HQ for duty (e.g., DCJTF, chief of staff, or J-3).”⁴⁸

(b) “Component liaison personnel to the JTF HQ should be of sufficient rank (recommend equal rank of JTF primary staff officers) to influence the decision making process.”⁴⁹

(3) “The J-3 is responsible for the operation of the **Joint Operations Center** for the joint force commander.”⁵⁰

(4) “SOF **LNOs [liaison officers]** ensure the timely exchange of necessary operational and support information both to aid mission execution and preclude fratricide, duplication of effort, disruption of ongoing operations, or loss of intelligence sources. SOF LNOs may assist in the coordination of fire support, overflight, aerial refueling, targeting, deception, PSYOP [psychological operations], CA [civil affairs], and other theater-operational issues based on ongoing and projected SOF missions. These efforts are crucial to maintaining the geographic combatant

commander's unity of effort, coordination of limited resources and assets, and the campaign tempo."⁵¹

(5) "The **JFSOCC provides a SOLE [special operations liaison element] to the JFACC** (or appropriate Service component air C2 facility) to coordinate and synchronize SOF air and surface operations within the joint air operations center (JAOC). . . Special Operations Coordination Element (SOCOORD). The SOCOORD serves as the primary advisor to an Army corps or Marine expeditionary force (MEF) commander with regard to SOF integration, capabilities, and limitations."⁵²

(6) Appendix B, "Liaison Elements Within the JAOC," in JP 3-56.1 describes the battlefield coordination element, special operations liaison element, space liaison officer, naval and amphibious liaison element, air mobility element, strategic liaison team, and Air Force liaison element.

(7) "A JAOC (air operations center (AOC) if a JFACC is not designated) is the organization through which the JFACC controls joint air operations, including theater airlift. Within the JAOC, an airlift coordination cell (ALCC) plans, coordinates, and manages the execution of theater airlift operations."⁵³

(8) "The JFC normally designates a component commander or a member of the joint force headquarters staff as the **joint rear area coordinator** (JRAC). The JFC considers mission requirements, force capabilities, the nature of the JRA, and the threat in making the selection."⁵⁴

(9) "The JRAC will establish a **joint rear tactical operations center** (JRTOC), using joint force staff elements and representatives from components operating in the JRA to assist in meeting JRA security responsibilities."⁵⁵

(10) "**Intelligence and operations liaison within and between bases, base clusters and higher headquarters** is essential in developing defense plans and executing defensive operations. Early and continuous liaison with HN [host nation] and allied organizations, and with established response forces, must be conducted to ensure effective and coordinated actions when required."⁵⁶

(11) Appendix D, "Base Defense Operations Center," in JP 3-10.1 discusses the **base defense operations center** organization, Air Force base defense, and Level I threat considerations.

(12) "During joint operations, the **JSRC [joint search and rescue center]** is the focal point of all joint CSAR coordination. The JSRC

should have authority to conduct joint CSAR coordination to all levels of command.”⁵⁷

(13) “Exchange of **CSAR liaison officers** assists in communications efforts and enhances understanding between components and commands, particularly during early phases of an operation when component RCCs [rescue coordination center] may be forming or normal CSAR communications nets have yet to be established.”⁵⁸

(14) “**Special Operations Command and Control Element (SOCCE)**. The SOCCE is the focal point for the synchronization of SOF activities with land and maritime operations. The SOCCE is normally employed when SOF conduct operations in conjunction with a conventional force. It collocates with the command element of the supported commander and performs C2 or liaison functions directed by the JFSOCC (or JSOTF commander). The focus of the coordination is on the synchronization of effects and deconfliction of fires.”⁵⁹

d. **JFC’s Role as Synchronization of Component’s Execution**

(1) “JFCs synchronize the actions of air, land, sea, space, and special operations forces to achieve strategic and operational objectives through integrated, joint campaigns and major operations.”⁶⁰

(2) “Maneuver and interdiction could be conducted relatively independent of each other in certain circumstances. However, synchronizing interdiction and maneuver and their joint fires enhances the ability for each to more fully contribute to a successful outcome of a campaign or major operation.”⁶¹

(3) “Control serves its purpose if it allows commanders freedom to operate, delegate authority, place themselves in the best position to lead, and synchronize actions throughout the operational area.”⁶²

(4) “JFCs integrate and synchronize operations in a manner that applies force from different dimensions to shock, disrupt, and defeat opponents.”⁶³

(5) “JFCs can employ their forces for a variety of purposes; the principal challenge is to combine force capabilities and operations into a concentrated effort. The planning, coordination, and integration of joint interdiction with other operations (such as maneuver) can yield unique advantages. This synchronization of effort begins with the JFC’s theater- and/or JOA-level perspectives and objectives. Likewise, the JFC’s theater and/or JOA campaign or operation plan facilitates such

synchronization and helps to ensure that interdiction operations are part of a larger design aimed at achieving the JFC's objectives."⁶⁴

(6) "The joint campaign plan is based on the commander's concept, which presents a broad vision of the required aim or end state and how operations will be sequenced and synchronized to achieve objectives. Thus, a campaign plan is an essential tool for laying out a clear, definable path linking the mission to the desired end state."⁶⁵

(7) "The JFC is responsible for ensuring the synchronization and integration of fires. The JFC must have systems that allow rapid response to changes as they occur. In this effort, liaison elements play a pivotal role in the coordination of joint fire support. The challenge for the JFC is to integrate and synchronize the wide range of capabilities at the JFC's disposal to achieve the campaign and/or operation objectives."⁶⁶

(8) "A **campaign plan** describes how a series of joint major operations are arranged in time, space, and purpose to achieve a strategic objective. It orients on the enemy's centers of gravity; achieves simultaneous and synchronized employment of all available land, sea, air, space-based assets, and special operations forces; clearly defines an end state that constitutes success, failure, mission termination, or exit strategy; and serves as the basis for subordinate planning. Two of the most important aspects of this plan are the synchronized employment of forces and the concept for their sustainment."⁶⁷

(9) ". . . the CJTF must synchronize the actions of all the forces. In some operations, the CJTF will have to coordinate military actions with those of nonmilitary organizations (e.g., NGOs [nongovernmental organizations] and PVOs [private voluntary organizations])."⁶⁸

(10) "A JPG [joint planning group] should conduct a crosswalk of component orders compared to the JTF order. This crosswalk should consist of simple, main event synchronization and deconfliction. Once again, a synchronization matrix could be used. Any problem areas should be identified and coordinated and deconflicted."⁶⁹

e. **Multinational Considerations**

(1) **JP 1** addresses "multinational endeavors" in a section of Chapter III, "Fundamentals of Joint Warfare." Some examples of the key guidance are as follows:

(a) "Here again the role of the combatant commanders in conducting the broad sweep of unified operations within their theaters is crucial and requires acute political sensitivity (the supporting joint and

component commanders within combatant commands also play key roles in this regard).”⁷⁰

(b) “First, we should always operate from a basis of partnership and mutual respect.”⁷¹

(c) “Experience shows that simplicity and clarity of plan and statement are even more necessary in the combined and coalition environment than in US-only operations.”⁷²

(d) “Finally, planning, training, and exercising with allies promote mutual respect and teamwork.”⁷³

(2) “As shown in Figure I-3, there are some general principles [common understanding, coordinated policy, trust and understanding] for attaining unity of effort among allied or coalition forces. Unity of command may not be politically feasible but should be a goal if at all possible. Although important, it is only one of the components of unity of effort, and the others must be attained in any case.”⁷⁴

(3) Chapter VI, “Multinational Operations,” of **JP 3-0** contains an extensive discussion (three pages) in subparagraph 3d about C2 during multinational operations. The text describes alliances and coalitions; parallel, lead-nation, and combination command arrangements; the principles of coordination and liaison; the importance of reliable communications; and standardizing procedures. Two figures are provided to illustrate a combined command structure and the coalition command relationships for Operation DESERT STORM. Some key principles are provided below:

(a) “Successful multinational operations can center on achieving **unity of effort** from the outset. Participating nations need to provide the multinational force commander sufficient authority over their national forces to achieve this unity. In turn, multinational force commanders and staffs exercise their authority to unify the efforts of the multinational force toward common objectives. Such authority, however, is seldom absolute. Consensus and compromise are important aspects of decision making in multinational organizations.”⁷⁵

(b) “**Alliances** typically have developed C2 structures, systems, and procedures. Alliance forces typically mirror their alliance composition, with the predominant nation providing the alliance force commander. Staffs are integrated, and subordinate commands are often led by senior representatives from member nations.”⁷⁶

(c) “. . . **coalitions** are most often characterized by one of two basic structures: parallel command or lead nation command. . . . Coalition forces control operations through existing national chains of command.”⁷⁷

(d) “Robust liaison is critical to developing and maintaining unity of effort in coalition operations. Liaison exchange should occur between senior and subordinate commands and between lateral or like forces, such as between national SOF units or naval forces.”⁷⁸

(e) “To the extent possible, procedures should be standardized within the multinational force, especially if mistakes can result in failed missions or fratricide. Procedures such as control of attacking aircraft, maneuver control and fire support coordinating measures, and requests for supporting fires should be standardized. Where this is not possible, liaison teams should be tasked to facilitate coordination and deconflict operations. JFCs should fully exploit all capabilities available to them to coordinate operations, including Marine air/naval gunfire liaison companies and/or teams and Air Force tactical air control parties.”⁷⁹

(4) “**JP 5-00.2** states that “US-led JTFs should expect to participate as part of a multinational force in most future military endeavors throughout the range of military operations. Such participation with multinational forces may complicate normal unilateral organization, planning, and operations.”⁸⁰ The pertinent paragraphs contain guidance on multinational considerations for C2, intelligence operations, operations, logistics, planning, and C4 system support.

(5) **Chapter VIII, “Intelligence Support for Multinational Operations,” in JP 2-0** addresses the multinational intelligence architecture and provides a figure illustrating the arrangement. It explains that during UNOSOM II in Somalia “two levels of information (intelligence) were established: Level 1 (can be shown to, but not retained by coalition/UN [United Nations]) and Level 2 (intelligence that has been properly cleared for release to coalition/UN).”⁸¹

(6) **Appendix U, “Personnel Support to Military Operations in a Multinational Environment,” in JP 1-0** addresses, among other items, personnel support considerations during UN operations and NATO [North Atlantic Treaty Organization] operations.

(7) “Exchange of CSAR liaison officers between the JSRC and multinational forces is critical to the success of CSAR operations in a multinational environment.”⁸²

f. **Expeditionary Force C2 Outside Theater and En route**

(1) "In accordance with the "Forces for Unified Commands" and the "Unified Command Plan," except as otherwise directed by the President or the Secretary of Defense, all forces operating within the geographic area assigned to a combatant command shall be assigned or attached to and under the command of the commander of that command. Forces directed by the President or the Secretary of Defense may conduct operations from or within any geographic area as required for accomplishing assigned tasks, as mutually agreed by the commanders concerned or as directed by the President or the Secretary of Defense. Transient forces do not come under the chain of command of the area commander solely by their movement across area of responsibility (AOR)/joint operations area (JOA) boundaries."⁸³

(2) "Each area commander will be kept apprised of the presence, mission, movement, and duration of stay of forces within the AOR/JOA other than those assigned to the area command. Also, the area commander will be apprised of the command channels under which these transient forces will function. The authority directing movement or permanent location of transient forces is responsible for providing this information. . . Transient forces within the assigned AOR of a combatant commander are subject to the area commander's orders in some instances, e.g., for coordination for emergency defense or allocation of local facilities. However, transient forces are not part of the area commander's command, and the area commander is not in their normal chain of command."⁸⁴

(3) "C2 of the deployment should remain with the JTF establishing authority or with the CJTF at predeployment HQ until sufficient JTF HQ deployment increments have closed at forward locations to provide C2 capabilities required to control deployed or deploying JTF forces."⁸⁵

(4) "C2 of redeploying forces should remain with the CJTF in the JOA until the CJTF is relieved of responsibility for JTF operations in the JOA, and sufficient JTF HQ redeployment increments have closed at redeployment sites to provide C2 capabilities to control redeployed or redeploying forces."⁸⁶

(5) "To plan for employment of transient forces by ensuring that base defense plans include provisions for augmenting the regularly assigned base defense forces during an attack or when the base is threatened with attack. In an emergency, the base commander will be considered to be an area commander. As such, the commander will have the authority to require support from transient forces for base defense."⁸⁷

g. **Effects-based Operations**

(1) “Joint interdiction operations can achieve tactical, operational, or strategic level effects, and can significantly affect the course of a campaign or major operation.”⁸⁸

(2) “However, geographic distance (that is, “close” versus “deep”) should not constitute the primary distinction between different forms of interdiction; the most important aspect in planning interdiction operations is the effect desired.”⁸⁹

(3) “The supported commander specifies target effects to defeat threats to the maneuver force, to position the enemy for defeat by maneuver forces, and to avoid fratricide or hindrance to friendly maneuver.”⁹⁰

(4) “Joint fire support links weapons effects to land, maritime, amphibious, and special operations forces movement, maneuver, and control of territory, populations, and key waters. . . Typically, joint fire support has an immediate or near term effect on the conduct of friendly operations.”⁹¹

(5) “Finally, successful C2 of joint fire support operations integrates fire support planning and coordination, tactical fire direction procedures, air operations, and technical fire direction procedures to achieve the supported commander’s desired effects.”⁹²

(6) “Maneuver positions forces at decisive points to achieve surprise, psychological shock, physical momentum, and massed effects.”⁹³

(7) “Operations other than war can involve simultaneous actions within an AOR. These actions may or may not involve the use of force at times; part of the theater could also be in a wartime state. In such situations, geographic combatant commanders should pay particular attention to integrating and coordinating the effects and activities of forces toward a common purpose that supports attaining theater, national, and multinational strategic objectives.”⁹⁴

4. **Command Relationships**

a. **Basic Command Relationships**. JP 0-2 devotes an entire chapter (III, 12 pages) to command relationships. Each authority (combatant command (command authority) (COCOM), OPCON, TACON, and support) is described in detail (major paragraph). Additionally, related subjects such as command channel, staff channel, unity of command, command relationships and the assignment and transfer of forces (major paragraph), the differences between the levels of command authority, categories of

support, and other authorities (administrative control, coordinating authority, direct liaison authorized) are addressed. The publication also provides the policy for command and control of US Marine Corps (USMC) tactical air. Some excerpts on command relationships guidance from JP 0-2 and other approved joint publications are provided as follows:

(1) “**command relationships**—The interrelated responsibilities between commanders, as well as the authority of commanders in the chain of command.”⁹⁵

(2) “**COCOM** is the authority of a combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training (or in the case of USSOCOM [US Special Operations Command], training of assigned forces), and logistics necessary to accomplish the missions assigned to the command. COCOM should be exercised through the commanders of subordinate organizations. Normally, this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. COCOM provides full authority to organize and employ commands and forces as the combatant commander considers necessary to accomplish assigned missions. . . .”⁹⁶

(3) “**OPCON** is inherent in COCOM and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. OPCON includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. It should be exercised through the commanders of subordinate organizations; normally, this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. OPCON normally provides full authority to organize commands and forces and employ those forces as the commander in operational control considers necessary to accomplish assigned missions. It does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. These elements of COCOM must be specifically delegated by the combatant commander. OPCON does include the authority to delineate functional responsibilities and geographic joint operations areas of subordinate joint force commanders. . . .”⁹⁷

(4) “**TACON** is the command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and usually local direction and control of

both the supported and supporting commander understand the degree of authority the supported commander is granted.

b. The supported commander should ensure that the supporting commander understands the assistance required. The supporting commander will then provide the assistance needed, subject to the supporting commander's existing capabilities and other assigned tasks. When the supporting commander cannot fulfill the needs of the supported commander, the establishing authority will be notified by either the supported or supporting commander. The establishing authority is responsible for determining a solution.

c. An establishing directive is normally issued to specify the purpose of the support relationship, the effect desired, and the scope of the action to be taken. It should also include:

- The forces and other resources allocated to the supporting effort.
- The time, place, level, and duration of the supporting effort.
- The relative priority of the supporting effort.
- The authority, if any, of the supporting commander to modify the supporting effort in the event of exceptional opportunity or an emergency.
- The degree of authority granted to the supported commander over the supporting effort.

d. Unless limited by the establishing directive, the supported commander will have the authority to exercise general direction of the supporting effort. General direction includes the designation and prioritization of targets or objectives, timing and duration of the supporting action, and other instructions necessary for coordination and efficiency.

e. The supporting commander determines the forces, tactics, methods, procedures, and communications to be employed in providing this support. The supporting commander will advise and coordinate with the supported commander on matters concerning the employment and limitations (e.g., logistics) of such support, assist in planning for the integration of such support into the supported commander's effort as a whole, and ensure that

support requirements are appropriately communicated into the supporting commander's organization.

f. The supporting commander has the responsibility to ascertain the needs of the supported force and take action to fulfill them within existing capabilities, consistent with priorities and requirements of other assigned tasks.

g. Several categories of support have been defined for use within a combatant command to better characterize the support that should be given. These are shown in Figure III-4.

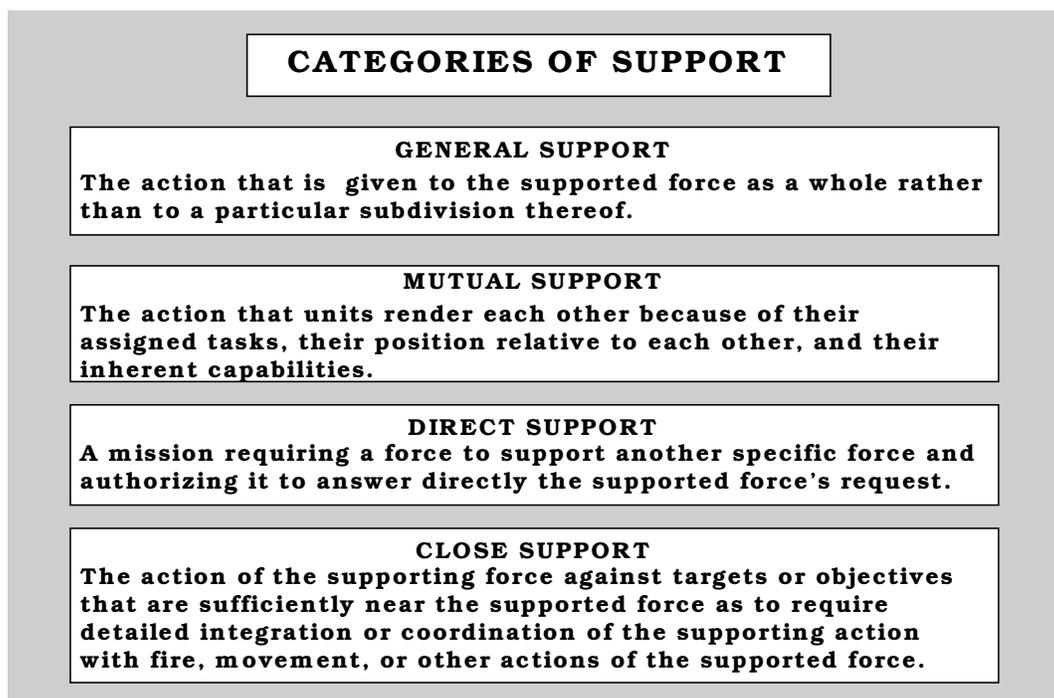


Figure III-4. Categories of Support”¹⁰⁰

(6) “**JFCs may establish support relationships** within the joint force to enhance unity of effort for given operational tasks, emphasize or clarify priorities, provide a subordinate with an additional capability, or combine the effects of similar assets.”¹⁰¹

(7) “**supported commander**—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 operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff.”¹⁰²

(8) **“Supported Commander**

(a) **Exercises the degree of authority over supporting forces** as determined by the common superior commander.

(b) **Exercises general direction of the supporting effort** as outlined in Joint Pub 0-2, unless otherwise prescribed.”¹⁰³

(9) **“supporting commander**—A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. Includes the designated combatant commands and Defense agencies as appropriate.”¹⁰⁴

(10) **“Supporting Commanders**

(1) **Exercise OPCON** (COCOM if the supporting commander is a Combatant Commander) over assigned and attached forces.

(2) **Prescribe the tactics, methods, communications, and procedures to be employed by elements of the supporting force** in fulfilling objectives, timing, and duration of the supporting action within existing capabilities, consistent with priorities and requirements of other assigned tasks.

(3) **Coordinate with the supported commanders and other supporting commanders** as necessary to ensure effective and efficient support.

(4) Monitor the operational situation and, as required, **keep the supported commander informed.**

(5) **Provide liaison personnel** to CJTF, JTF component commanders, and other supporting commanders as necessary or as directed by CJTF.”¹⁰⁵

b. **Strategic Level**

(1) **Chapter III of JP 3-05** contains guidance on the command relationships between theater SOF and other organizations at the strategic level. A figure is provided to illustrate theater-level C2. Some excerpts are:

(a) “Unless otherwise directed by the Secretary of Defense, all SOF based in the continental United States are under the COCOM of USCINCSOC [Commander in Chief, United States Special Operations Command]. SOF assigned to a theater are under the COCOM of the

geographic combatant commander. The geographic combatant commander may exercise this authority through the commander of a subordinate joint force, Service component command, or functional component command.”¹⁰⁶

(b) “The NCA, however, could choose to exercise OPCON directly over SOF for a particular operation without any intervening levels of command, depending upon the urgency or political sensitivity of the mission.”¹⁰⁷

(2) **JP 4-01.1, “JTTP for Airlift Support to Joint Operations,”** contains a discussion command and control of airlift forces and a figure illustrating common-user airlift command relationships. Some excerpts are:

(a) “USCINTRANS [Commander in Chief, United States Transportation Command] exercises combatant command (command authority) (COCOM) over all continental United States (CONUS)-based, common-user C-5, C-17, KC-10, and C-141 aircraft; most KC-135 aircraft; some C-130 aircraft; and C-9 aeromedical evacuation airlift forces for rapid response to NCA requirements.”¹⁰⁸

(b) “Geographic combatant commanders (including the Commander in Chief, US Atlantic Command) [USACOM] exercise COCOM over assigned airlift forces, both common-user and Service organic. They normally exercise COCOM of theater-assigned common-user airlift and aeromedical evacuation through the Air Force component commander (AFCC); . . .”¹⁰⁹

(3) “Unless otherwise directed by the NCA, combatant commanders exercise COCOM over all assigned military PSYOP assets.”¹¹⁰

c. **Operational/Tactical Level**

(1) “The JFC must designate. . . the appropriate command relationship(s) the functional component commander will exercise (e.g., **a joint force special operations component commander normally has OPCON of assigned forces and a joint force air component commander is normally delegated TACON of the sorties or other military capability made available**).”¹¹¹

(2) “JFCs may also establish a supporting and/or supported relationship between components to facilitate operations. Regardless, the establishing JFC defines the authority and responsibilities of functional component commanders based on the concept of operations and may

alter their authority and responsibilities during the course of an operation.”¹¹²

(3) **“The authority and command relationships of the JFACC are established by the JFC.** These typically include exercising operational control over assigned and attached forces and tactical control (TACON) over other military capabilities and/or forces made available for tasking. However, the JFC may decide that DS [direct support] is a more appropriate command authority for certain capabilities and/or forces. . . Unless limited by the establishing directive, the supported commander will have the authority to exercise general direction of the supporting effort. General direction includes the duration of the supporting action, and other instructions necessary for coordination and efficiency. The supporting commander determines the forces, tactics, methods, procedures, and communications to be employed in providing this support.”¹¹³

(4) **Chapter III of JP 3-05** also provides guidance on command relationships at the operational level and a figure is shown to illustrate the relationships of SOF forces and liaison elements with other organizations within a subordinate joint force. Some excerpts are:

(a) “SOF may be under the OPCON or TACON or in support of Service or functional component commanders.”¹¹⁴

(b) “The broad range of PSYOP activities, conducted across the strategic, operational, and tactical levels with the requirement to fully integrate with interagency activities as well as with conventional forces mandates that PSYOP relationships be distinct from other SO [special operations] forces. The focus of PSYOP is broader than just those activities conducted by the theater SOC, and its C2 must be such that it allows for direct access to the JFC and full integration at all levels. C2 of PSYOP forces is normally executed by the establishment of a joint psychological operations task force directly under the JFC.”¹¹⁵

(c) “CA forces must also be able to fully integrate with interagency activities and conventional forces. Effective integration with local and HN authorities as well as PVOs and NGOs requires a C2 structure that is directly linked to the JFC. CA forces are normally attached to supported units.”¹¹⁶

(5) JP 3-53 addresses command relationships in Chapter III, “Command and Control.” It discusses normal and unique situations and provides a figure to illustrate command relationships between the joint

psychological operations task force (JPOTF) and other organizations in the joint force. Some excerpts are:

(a) “The combatant commander may place PSYOP forces under OPCON of a subordinate joint force or component commander for appropriate mission support.”¹¹⁷

(b) “Although the POTF could be assigned anywhere in the JFC structure, it ordinarily remains OPCON to the JFC and reports through the J-3 . . .”¹¹⁸

(b) “When a POTF is established, the following PSYOP command relationships are normally established. Tactical PSYOP forces are placed in direct support of maneuver elements. Dissemination forces operate in general support of the JFC with tactical control by the POTF commander. Multipurpose assets that are primarily PSYOP platforms, such as COMMANDO SOLO, remain OPCON to the Service component or the joint special operations task force and tactical control to the POTF commander.”¹¹⁹

(6) JP 3-10.1 provides figures which illustrate JRA C2 networks when the Army component is the JRA coordinator and when the JRA coordinator is selected from the JFC’s staff.

(7) **“The AFCC or joint force air component commander (JFACC), if established, will normally exercise operational control (OPCON) of common-user theater airlift forces.** In cases where the assigned JFACC is other than Air Force, the AFCC should supply the personnel with airlift expertise to the joint air operations center (JAOC) to run the theater airlift operation. The JFC may specify the type of command authority (i.e., operational control, tactical control, support) or coordinating authority to be exercised by the JFACC (if established) or the AFCC over any forces allocated to augment theater airlift operations.”¹²⁰

(8) “USCINCTRANS exercises combatant command (command authority) of assigned airlift forces. The Commander, AMC [Air Mobility Command], exercises OPCON of USTRANSCOM [US Transportation Command]-assigned airlift assets through the Commander, TACC [Tanker/Airlift Control Center]. The exception is the Commander, Air Combat Command, who exercises OPCON of C-130s.”¹²¹

(9) “The geographic combatant commander ensures that appropriate command relationships between subordinate area, subarea, and local base defense commanders are established and local defense areas are delineated.”¹²²

(10) JP 3-50.2 devotes a major paragraph in Chapter III, “Command, Control, Coordination, and Communications,” to command relationships during combat search and rescue operations. Some excerpts are:

(a) “JFCs normally exercise command authority for CSAR either through a designated component commander whose RCC has been designated by the JFC to function also as the JSRC or through a designated JSRC Director, if the JSRC is part of the JFC staff. Use of a designated JSRC facilitates planning and executing joint CSAR operations by providing the JFC the greatest latitude and flexibility for coordinating and executing joint, component, and unit CSAR responsibilities and activities. Typical joint CSAR command relationships diagrams are provided in Figures III-1, III-2, and III-3.”¹²³

(b) “When components conduct CSAR missions with assigned forces in support of their own isolated personnel, these forces are under component operational control.”¹²⁴

d. **Multinational Considerations**

(1) “Complex or unclear command relationships or organization are counterproductive to developing synergy among multinational forces.”¹²⁵

(2) “The President retains and will never relinquish command authority over US forces. On a case-by-case basis, the President will consider placing appropriate US forces under the OPCON of a competent UN commander for specific UN operations authorized by the Security Council.”¹²⁶

(3) **“SOF under non-US command.** When directed by the NCA through the Chairman of the Joint Chiefs of Staff (CJCS), geographic combatant commanders may place SOF units under the OPCON of a non-US combined forces commander. In such instances, OPCON of operational US SOF units would be exercised by a US commander within the combined command structure.”¹²⁷

(4) “When authorized, combatant commanders may allow multinational commanders to exercise operational control (OPCON) of PSYOP forces.”¹²⁸

(5) “The JRA will normally be sovereign territory presided over by viable and capable HN governments. These governments, represented by forces and their law enforcement agencies, will generally have overall responsibility for many of the functions identified with joint rear area operations. In these circumstances, the CINC will be responsible for coordinating US requirements for selected functions with HN commands

(and receiving significant HN assistance) while assuming full responsibility for other functions. (NOTE: Even though all functions are generally coordinated with the HN, selected functions like sustainment are usually US responsibilities.)”¹²⁹

5. **Organization of Joint Forces.** Section A (Doctrine and Policy for Establishing Joint Commands) in Chapter IV of JP 0-2 devotes 10 pages to addressing the authority to establish, basis for establishing, composition, responsibilities of the commander, and organizational options of unified, specified, subordinate unified, and JTF commands. Additionally, Section B of Chapter IV in JP 0-2 contains two major paragraphs on Service and functional components. The discussions on Service components include designation guidance, responsibilities, the relationship between Service component commanders at any level and the combatant command level Service components, communication with the Chief of Service, and logistics authority. The discussions on functional components include commander designation, responsibilities, designation of military capability and command relationships, and staff composition.

a. **Basic Organizing Principles**

(1) Section A of Chapter II, “Joint Task Force Organization and Staffing,” in JP 5-00.2 addresses JTF organization principles such as unity of effort, unity of command, centralized planning, decentralized execution, common doctrine, a command emphasis on interoperability, and other factors like the mission. Some excerpts include:

(a) “The first principle in joint force organization is that CJTFs organize forces to accomplish the mission based on their vision and concept of operations.”¹³⁰

(b) “**Centralized planning** — vital for controlling and coordinating the efforts of the forces and normally can be achieved by clear communication of the CJTF’s intent to the JTF staff and subordinate commands.”¹³¹

(c) “**Decentralized execution** — essential because no one commander can control the detailed actions of a large number of units or individuals.”¹³²

(2) “The base and base cluster (designated when required) are the fundamental building blocks for planning, coordinating, and executing base defense operations.”¹³³

b. **Subordinate Commands**

(1) **“All joint forces include Service component commands** because administrative and logistic support for joint forces are provided through Service component commands.”¹³⁴

(2) **“A combatant command-level Service component command** consists of the Service component commander and all the Service forces, such as individuals, units, detachments, organizations, and installations, including the support forces, that have been assigned to a combatant command or further assigned to a subordinate unified command or joint task force (forces assigned to the combatant commands are identified in the “Forces for Unified Commands” memorandum signed by the Secretary of Defense).”¹³⁵

(3) **“functional component command.** A command normally, but not necessarily, composed of forces of two or more Military Departments which may be established across the range of military operations to perform particular operational missions that may be of short duration or may extend over a period of time.”¹³⁶

(a) **“The JFC can establish functional component commands to conduct operations.** Functional component commands can be appropriate when forces from two or more Military Departments must operate in the same dimension or medium or there is a need to accomplish a distinct aspect of the assigned mission.”¹³⁷

(b) **“Functional component commands may be established across the range of military operations to perform operational missions that may be of short or extended duration.** JFCs may elect to centralize selected functions within the joint force, but should strive to avoid reducing the versatility, responsiveness, and initiative of subordinate forces. . . . The responsibilities and authority of a functional component command must be assigned by the establishing JFC. The establishment of a functional component commander must not affect the command relationships between Service component commanders and the JFC.”¹³⁸

(c) **“JFCs may establish functional components to provide centralized direction and control of certain functions and types of operations when it is feasible and necessary to fix responsibility for certain normal, continuing functions, or when it is appropriate and desirable to establish the authority and responsibility of a subordinate commander.** These conditions apply when the scope of operations requires that the similar capabilities and functions of forces from more than one Service be

directed toward closely related objectives and unity of command and effort are primary considerations. For example, when the scope of operations is large, and JFCs need to divide their attention between major operations or phases of operations that are functionally dominated—and synchronize those operations—it may be useful to establish functionally oriented commanders responsible for the major operations. JFCs may conduct operations through functional components or employ them primarily to coordinate selected functions. . . . **Functional componentcy can be appropriate when** forces from two or more Services operate in the same dimension or medium. A joint force land component commander (JFLCC) is one example. . . . The nature of operations, mix of Service forces, and command and control capabilities are normally primary factors in selecting the functional component commander.”¹³⁹

(4) Chapter III, “Joint Task Force Subordinate Commands,” of JP 5-00.2 addresses Service components, functional components, and special purpose subordinate task forces. There are extensive discussions on functional components in general and the JFACC, JFLCC, joint force maritime component commander (JFMCC), JFSOCC, joint civil-military operations task force (JCMOTF), and joint psychological operations task force (JPOTF). Each discussion addresses, among other things, the functional component commander’s responsibilities and staff organization. Some excerpts are:

(a) “Most often, joint forces are organized with a combination of Service and functional component commands and subordinate task forces with operational responsibilities.”¹⁴⁰

(b) “All joint forces include Service component commands because administrative and logistic support for joint forces are provided through Service component commands.”¹⁴¹

(c) “The responsibilities and authority of a functional component command must be assigned by the CJTF. Establishment of a functional component commander must not affect the command relationships between Service component commanders and the CJTF.”¹⁴²

(d) “The CJTF normally will designate a JFACC. The CJTF will base the decision to designate a JFACC on several factors, such as: the CJTF’s overall mission, concept of operations, the missions and tasks assigned to subordinate commanders, forces available, and the duration and nature of C2 of joint air operations required. A CJTF will assign JFACC responsibilities to the component commander

having the preponderance of air assets and the capability to plan, task, and control joint air operations.”¹⁴³

(e) “Consider the following when deciding upon the formation of a JFLCC: availability of ports of debarkation; amount of mutual support possible between land forces; duration of the mission; requirement for land force simultaneous or sequential operations; likelihood of land forces operating adjacent to one another; requirements for special capabilities resident in one land force being required for use by the other; and amount, level of intensity, and requirement for coordination of other component support to land forces.”¹⁴⁴

(f) “Consider the following when deciding upon the formation of a JFMCC; the nature of the joint operation as one of primarily air, land, or sea; the use of non-US Navy vessels; the requirement of other components to support maritime operations; the requirement for maritime operations to extend inland (riverine and amphibious operations); enemy capability to influence maritime operations from other environments (land and air).”¹⁴⁵

(g) “The CJTF may designate a JFSOCC to accomplish a specific mission or control SOF in the JOA. (1) The JFSOCC normally will be the commander with the preponderance of SOF and the requisite C2. (2) Normally, the JFSOCC is the commander of a joint special operations task force (JSOTF).”¹⁴⁶

(h) “Because of the special nature of PSYOP and CA activities and the politically high visibility of these operations, the CJTF may desire to establish separate task forces for these activities. However in certain circumstances, CA and PSYOP personnel may be attached to the JSOTF as required. Normally, the PSYOP and CA task forces work directly for the CJTF under the staff supervision of the J-3.”¹⁴⁷

(5) JP 3-56.1 devotes major paragraphs to organizing joint forces, JFACC organization, and the JFC staff option for air operations. Some excerpts are:

(a) “In order to accomplish the assigned mission, the JFC develops a concept of operation and organizes forces based on that concept. The organization should be sufficiently **flexible** to meet the planned phases of the contemplated operations and any development that may necessitate a change in the plan, while preserving the **responsiveness** of individual component capabilities. Sound organization should provide for unity of effort, centralized planning, and decentralized execution. **Unity of effort** is necessary for

effectiveness and efficiency. **Centralized planning** is essential for controlling and coordinating the efforts of all available forces. **Decentralized execution** is essential to generate the tempo of operations required and to cope with the uncertainty, disorder, and fluidity of combat.”¹⁴⁸

(b) “**The JFC will normally designate a JFACC** to exploit the capabilities of joint air operations. The JFACC directs this exploitation through a cohesive joint air operations plan (centralized planning) and a responsive and integrated control system (decentralized execution).”¹⁴⁹

(c) “JFACC organizations may differ based on the specific AOR/JOA requirements and operations. However, the two organizations or functions that should be **common to all JAOCs are Combat Plans and Combat Operations. Planning “future joint air operations” is the responsibility of Combat Plans**, which includes the responsibility of drafting the joint air operations plan to support the JFC’s campaign or objectives and building the daily joint ATO [air tasking order]. **Execution of the daily joint ATO is carried out by Combat Operations.**”¹⁵⁰

(d) “In cases where a JFC does not designate a JFACC, the JFC may elect to directly task joint force air capabilities/forces. If this option is exercised by the JFC, the JFC’s staff will assist in planning and coordinating air operations for JFC approval. The JFC may elect to centralize selected functions (planning, coordinating, and tasking) within the staff to provide direction, control, and coordination of the capabilities and/or forces assigned to the joint force. . . The JFC’s decision not to designate a JFACC is influenced by **span of control, duration and scope of operations**, and the necessary degree of centralized planning and control.”¹⁵¹

(6) **JP 3-01.5** addresses joint force organization in Section A of Chapter II, “Responsibilities and Command Relationships.” Among other items, it discusses the area air defense commander (AADC), the JFACC, and component commanders with regard to theater missile defense. Some excerpts are:

(a) “Authority to integrate air defense forces and operations in overseas land areas will be delegated to the AADC. . . Preferably the AADC will also be the airspace control authority. If the JFC establishes a joint force air component commander (JFACC), then the JFC may also assign the responsibilities of the AADC to the JFACC.”¹⁵²

(b) “The JFC will normally assign responsibility for the planning and execution of JTMD [joint theater missile defense] attack operations outside the other component commanders AOs [area of operations] to the JFACC.”¹⁵³

(c) “**Close coordination** among component commanders, the JFC, and the AADC (if designated) is necessary to employ the most appropriate resources and measures to execute JTMD operations and to ensure a synergistic effort . Component-to-component coordination may be required in some situations as a result of the compressed time lines and short reaction times inherent in JTMD operations. Coordination among component commanders for JTMD operations usually includes the items illustrated in Figure II-2.”¹⁵⁴

(7) “**The JFC may designate a subordinate commander or a member of the JFC’s staff as the JRAC.** The JFC considers mission requirements, force capabilities, the nature of the JRA, and the threat in determining the JRAC.”¹⁵⁵

(8) “The base and base cluster (designated when required) are the fundamental building blocks for planning, coordinating, and executing base defense operations.”¹⁵⁶

(9) JP 3-17 devotes a major paragraph to the description and illustrations through figures of the Army, Marine Corps, Air Force, Navy, and Special Operations components’ system for controlling theater air movements.

c. **Dual-hatting Considerations**

(1) “**The JTF commander may also be a Service component commander.** When this is the case, the commander also has the responsibilities associated with Service component command for the forces belonging to the parent Service.”¹⁵⁷

(2) Section B of Chapter II in JP 5-00.2 lists some CJTF responsibilities and also gives some guidance on dual-hatting as follows:

(a) “Although normally not recommended, the CJTF also may be a Service component commander.

- When this is the case, the commander retains all the responsibilities associated with the Service component command.

- Dual-hatting a Service component commander as the CJTF may place this commander in an unwieldy position, may foster a parochial single-Service or component view of overall joint operations and component contributions, and create potential conflicts of interest.”¹⁵⁸

(b) “The DCJTF may be dual-hatted as the chief of staff.”¹⁵⁹

d. **Multinational Considerations**

(1) “When organizing joint forces with multi-national forces, simplicity and clarity are critical.”¹⁶⁰

(2) “As in the case of joint operations, basic multinational options are area or functional orientation and single-Service or joint organization, to which are added national or multinational organization. The basic building blocks are normally national Service component forces. However, the combatant functions for which forces from other nations are structured are not necessarily consistent with those of US forces.”¹⁶¹

(3) “If some level of force integration is necessary to conduct operations, planners should determine where the integration of units and headquarters needs to occur. Such decisions affect the deployment priorities and schedules for personnel and equipment. If integration is to occur at an intermediate staging base or port of debarkation, its impact on those bases or ports can be significant and needs to be addressed and accounted for by base and/or port commanders and staffs.”¹⁶²

(4) “Appropriate points of coordination and control for PSYOP activities and forces should be established through a multinational PSYOP cell.”¹⁶³

6. **Organization of the JFC’s Staff**

a. Section B, “The Commander, Staff, and Components of a Joint Force,” of Chapter IV in **JP 0-2** contains 5 pages of joint doctrine addressing the responsibilities of superior, subordinate, and adjacent commanders; basic guidance for organizing a joint force staff; and the staff organization with sections on each principle member (Chief of Staff, division heads).

b. Chapter II, “Joint Task Force Organization and Staffing,” in JP 5-00.2 contains a major paragraph on “staff organization” a detailed figure illustrating a typical JTF staff organization. Chapter II also contains a major paragraph on “JTF headquarters’ functions” and an entire section (b) on “key functions and responsibilities” of the principal JTF headquarters members including the CJTF, Deputy CJTF, Chief of Staff, personal staff of the CJTF, and special staff group. Additional organizational considerations

are included. Representative excerpts are provided below. Chapters V through IX are used to describe the organization, functions, and responsibilities of the JTF J-1, J-2, J-3, J-4, J-5, and J-6 directorates. Those chapters include organizational charts and checklists to assist the respective principal staff officer in fulfilling assigned responsibilities.

c. Chapter V, “Establishing a Joint Force Headquarters,” in JP 1-0 addresses the J-1 organization as follows:

(1) “Figure V-1 depicts a typical joint force J-1 organization. The actual composition of the J-1 will be dictated by the overall organization of the joint force and the operations to be conducted.”¹⁶⁴

(2) “The offices of the surgeon, chaplain, Inspector General, legal counsel, provost marshal, comptroller, public affairs officer, historian, and safety officer are normally established as personal and special staff. At the discretion of the JFC, some of these offices may be organized under the staff supervision of the J-1.”¹⁶⁵

d. Appendix B, “Organization and Functions of Combatant Command Logistic Staff (J-4) and Functions of Joint Logistic Centers, Offices, and Boards,” of **JP 4-0** addresses organizational considerations; key logistic staff functions; and the logistics center, offices, and boards. Logistics centers, offices, and boards are addressed in subparagraph 6i below.

e. Chapter IV, “Information Operations Organization,” in JP 3-13 provides guidance and illustrates the staff requirements for conducting information operations. It addresses joint force information operations (IO) organization, relationship with joint activities, and JTF IO cell relationships with supporting Department of Defense (DOD) activities.

f. **Guidelines on Selection, Formation, and Organization**

(1) “A JFC is authorized to organize the staff and assign responsibilities to individual Service members assigned to the staff as deemed necessary to ensure unity of effort and accomplishment of assigned missions.”¹⁶⁶

(2) “When fully formed, the JTF staff will be composed of appropriate members in key positions of responsibility from each Service or functional component having significant forces assigned to the command.”¹⁶⁷

(3) “Often there may be little time to shift from a peacetime organization to a different wartime organization. Any effort involved in doing so will reduce resources available to apply to the significant logistic problems that accompany deployment and other initial logistic tasks in war. The

logistic organization, therefore, should be tailored to respond to anticipated war tasks.”¹⁶⁸

g. Joint Force Staff Options and Factors

(1) “There are several options that may be used to form a JTF HQ (e.g., use a standing JTF HQ, augment a core Service component HQ, form ad hoc from various contributors). Whatever option is used, a building process will be necessary. Additionally, this process must support the mission and provide the best opportunity for success.”¹⁶⁹

(2) “The following options are available to the combatant commander for establishing the joint force HQ.

a. Designate a Service component or any suitable, subordinate unit HQ to serve as a joint force HQ.

b. Form the joint force HQ entirely from the combatant command staff. This option is primarily viable for short-term deployments.

c. Combine assets from the combatant command staff with those of the Service components. This creates a joint force HQ capable of deploying for longer periods. The joint force HQ may be augmented as necessary to provide essential capabilities.”¹⁷⁰

(3) “The following factors should be considered when creating a staff:

- Reasonably representative of force makeup as to numbers, experience, influence of position, and rank of members among the participating Services, functional components, and subordinate task forces.

- Filling key positions of responsibility with members from Service and functional components; and subordinate task forces will be based in part on the mission and type of operations to be conducted (e.g., predominantly ground operations — J-3 should be from the United States Army or United States Marine Corps).

- Force composition as it applies to capabilities, limitations, and required support.”¹⁷¹

(4) “Depending on the scope of the operation, the CJTF may have to coordinate and work with OGAs [other government agencies], NGOs, PVOs, and international organizations that will be operating within the affected area. Promoting unity of effort is paramount to successful

mission accomplishment. . . **If this is the situation, the establishment of an organization such as a CMOOC [civil-military operations center] may be warranted.**"¹⁷²

(5) "The CINCs will usually form command centers and operational planning teams in wartime. The logistic staff members in these groups are usually supported by a Logistic Readiness Center (LRC) or are teamed with representatives from various functional areas: fuels, ammunition, engineering, supply, surface transportation, sealift, airlift, and medical services. The LRC receives reports from Service components and external sources, distills information for presentation to the CINC, and responds to questions. In addition to operating the LRC and providing representation in the command center, the combatant command logistic staff performs four key functions: . . . **Monitors Current and Evolving Theater Logistic Capabilities. . . Coordinates Logistic Support With Upcoming Operations. . . Advises the CINCs on the Supportability of Proposed Operations or COAs. . . Acts as the CINC's Agent and Advocate to Non theater Logistic Organizations.**"¹⁷³

(6) "The **IO cell** is formed from select representatives from each staff element, component, and supporting agencies responsible for integrating capabilities and related activities. This cell merges capabilities and related activities into a synergistic plan. The cell coordinates staff elements and/or components represented in the IO cell to facilitate the detailed support necessary to plan and coordinate IO. Figure IV-1 provides an overview of a typical joint IO cell. The actual composition or members of the IO cell may vary based on the overall mission of the joint force, the role of IO in accomplishing the JFC's objectives, and the adversary's or potential adversary's capability to conduct IO. The existing C2W [command and control warfare] cell should be reconfigured to function as the IO cell. This provides the JFC with the capability to integrate, coordinate, and deconflict the full spectrum of IO."¹⁷⁴

(7) "Likewise, when the combatant commander activates a subordinate joint force (subunified command or JTF), the PSYOP planners should be on the JFC's staff."¹⁷⁵

h. **Functions and Responsibilities**

(1) "Responsibilities of the collective staff may include: . . . Assisting the CJTF to direct, control, and coordinate operations of assigned and attached forces and to coordinate planning activities of subordinate component commands."¹⁷⁶

(2) CJTF responsibilities include: “Determining the requirement for and providing guidance on the establishment of the necessary boards, offices, centers, and bureaus (e.g., Joint Visitors Bureau [JVB], Joint Movement Center, Joint Targeting Coordination Board [JTCCB], civil-military operations center [CMOC], IO cell) to enhance operational efficiency. . . Ensuring that the JTF HQ is organized to support the basic tenets of IO.”¹⁷⁷

(3) Deputy CJTF responsibilities include: “Performing special duties as directed by the CJTF (e.g., chairs the JTCCB, has cognizance of liaison personnel reporting to the JTF HQ, interagency coordination).”¹⁷⁸

(4) The Chief of Staff responsibilities include: “Establishing a scheme to develop a daily schedule for the JTF staff that emphasizes coordination, logic, and the CJTF’s CCIRs [commander’s critical information requirements]. It is important for the staff to be on a daily schedule that allows them to accomplish all tasks in the most effective and efficient manner. . . This schedule should depict a step- by-step approach that leads to accomplishing the tasks. Daily events (briefings, meetings, shift changes) should support each other and follow a consistent pattern. . . Often, this daily schedule is referred to as the “daily operations cycle,” or “battle rhythm.” The JTF daily operations cycle or battle rhythm is an essential element in ensuring that information is available when and where it is required.”¹⁷⁹

(5) “This staff [personal staff] may include (based on CJTF guidance) the public affairs officer (PAO), legal officer, chaplain, surgeon, inspector general (IG), provost marshal (PM), comptroller, political advisors, and others as directed.”¹⁸⁰

(6) “The JFC normally will assign responsibility for IO to a member of the joint staff, usually the Operations officer (J-3). When authorized, the J-3 will have primary staff responsibility for planning, coordinating, and integrating joint force IO.”¹⁸¹

(7) “Although specific responsibilities will vary, every superior commander possesses the general responsibilities to provide the following: . . . timely communication . . . forces and other means . . . all available communication . . . delegate authority . . .”¹⁸²

(8) “. . . all subordinate commanders possess the general responsibilities to provide for the following: . . . The accomplishment of missions or tasks . . . advice to the superior commander . . . timely information . . .”¹⁸³

(9) “Commanders who share a common superior or a common boundary possess the responsibility to provide for the following:

- Consider the impact of one's own actions or inactions on adjacent commanders.
- Timely information to adjacent commanders regarding one's own intentions and actions, as well as those of nonmilitary agencies or of the enemy, which may influence adjacent activity.
- Support adjacent commanders as required by the common aim and the unfolding situation.
- Coordinate the support provided and received."¹⁸⁴

i. **Multinational Considerations**

(1) "As in the case of a joint headquarters, a multinational headquarters should reflect the general composition of the multinational forces as a whole."¹⁸⁵

(2) "SOF are very valuable assets to a JTF. They possess unique capabilities and often are capable of achieving success where more conventional forces may falter. SOF are area oriented and usually have personnel experienced and conversant in the languages and cultures found in the JOA. . . SOF units can assist the JTF with liaison and coalition support teams to facilitate interoperability with multinational forces."¹⁸⁶

(3) "Overall management of a CMOC may be assigned to a multinational force commander, shared by a US and a multinational commander, or shared by a US commander and a civilian agency head."¹⁸⁷

(4) "When multinational forces are part of the JTF, members of these forces should be integrated into the staff. (1) A CJTF may gain insight into the capabilities of these forces by the above action. (2) Integration of these members into the JTF staff also promotes an atmosphere of trust and respect. (3) The CJTF should ensure that appropriate liaison personnel are provided to all multinational forces — (SOF could provide this capability)."¹⁸⁸

7. **The JFC's Staff Processes**. Section B of Chapter IV in JP 0-2 addresses the "joint command and staff process" in a major paragraph. It discusses estimates, decisions, directives, and follow-through in a general manner. JP 3-56.1 devotes a major paragraph to the JFC staff authority and responsibilities. It discusses JFC staff roles regarding planning, coordination, execution, joint airspace control, and joint air defense in the context of joint air operations. Other staff processes and references are provided below.

a. **Flattening.** There are no examples of direct references to flattening staffs or reducing the staffs.

b. **Span of Control**

(1) “**Span of control** is the JFC’s ability to command and control actions. Span of control is based on the number of subordinates, number of activities, and the AOR/JOA. Span of control is related to the duration and scope of joint air operations.”¹⁸⁹

(2) JP 5-00.2 lists possible responsibilities for the JFLCC, JFMCC, and JFSOCC as “Focusing on operational-level functions and their span of control.”¹⁹⁰

(3) “Base clusters may be designated when: The large number of bases in an area or subarea exceeds the commander’s normal span of control; . . .”¹⁹¹

c. **Reachback**

(1) “**The J-2 will have to rely upon or reach back to national intelligence organizations** to provide a comprehensive intelligence support effort. The J-2 must understand how the national intelligence organizations are organized and how they operate in order to best exploit their capabilities.”¹⁹²

(2) “NIST [national intelligence support team] provides a mission-tailored national intelligence ‘reachback’ capability to fulfill the stated intelligence requirements of the support JTF.”¹⁹³

(3) “The successful conduct of operations requires access to information available outside the operational area. Information infrastructures no longer parallel traditional command lines, and warfighters need frequent, instant, and reliable access to information at locations in the continental United States as well as in theater. For example, mobility and sustainment of forces are highly dependent on commercial infrastructures that include international telecommunications, the public switched network, commercial satellites and ground stations, transportation systems, and electric power grids. Joint forces require secure video teleconferencing, data base connectivity, direct downlink, and broadcast/receive capabilities for reachback access to intelligence, logistics, and other essential support data. The technical complexity and management of these information infrastructures could inhibit a commander’s ability to control the flow of information or dynamically manage available information and telecommunications resources. To

support offensive operations, JFCs may reach back to employ offensive capabilities and techniques to contribute to information superiority, to more effectively achieve objectives, or support other operations in their AOR or JOA.”¹⁹⁴

(4) “NIST provides a mission-tailored national intelligence ‘reachback’ capability to fulfill the stated intelligence requirements of the support JTF. Normally, it is composed of the DIA [Defense Intelligence Agency], Central Intelligence Agency, National Security Agency [NSA], and other intelligence resources, as required.”¹⁹⁵

d. **Collaborative Planning**

(1) **JP 5-0, “Doctrine for Planning Joint Operations,”** describes and elaborates on the Joint Operation Planning and Execution System (JOPES) in several paragraphs throughout and in an entire chapter (III). Some key excerpts are provided below:

(a) “The activities of the entire planning community must be integrated through an interoperable joint system that provides for uniform policies, procedures, and reporting structures supported by modern communications and computer systems. The system designed to provide interoperability is the Joint Operation Planning and Execution System (JOPES).”¹⁹⁶

(b) “JOPES is the principal system within the Department of Defense for translating policy decisions into operation plans and OPORDs [operation order] in support of national security objectives. To accomplish this task, JOPES consists of a deliberate and a crisis planning process as shown in Figure III-2.”¹⁹⁷

(2) “The entire JTF-specific process for joint planning fits within the overall planning process from NCA to JCS to the combatant commander, on down to the JTF. This process is especially close-knitted between the combatant commander and the JTF. Steps in the JTF process may be combined or eliminated based upon the combatant commander’s planning process and the time available. This collaborative planning relationship between combatant command and JTF levels is illustrated in Figure IX-24.”¹⁹⁸

(3) “The J-2 participates fully in the planning and decision making process, contributing knowledge concerning the battlespace and the threat and receiving guidance to help focus the intelligence effort. The intelligence planner examines tasks and subtasks, then determines what intelligence support and information will be required to achieve mission success.”¹⁹⁹

(4) “When either deliberate or crisis action planning is required, the degree to which military and civilian components can be integrated and harmonized within an interagency context will bear directly on the efficiency and success of the collective effort. To the extent feasible, joint planning should include all the participants from the outset. Appropriate decision-making structures should be established at headquarters and field levels in order to resolve political, humanitarian, and military issues and to coordinate operations. Establishment of coordination or liaison cells at each level will facilitate communication between participants.”²⁰⁰

(5) JP 3-13 requires the Service chiefs and CINCUSCOM to “Coordinate with DIA, Defense Information Systems Agency (DISA), and NSA to ensure development and population of data bases supporting collaborative planning, analysis, and execution of IO.”²⁰¹ It also requires the Director, National Security Agency to coordinate “with DIA, DISA, and the Services to ensure development and population of data bases supporting collaborative planning, analysis, and execution of IO,”²⁰² and the Defense Information Systems Agency to coordinate “with DIA, NSA, and the Services to ensure population of data bases supporting collaborative planning, analysis, and execution of IO.”²⁰³

e. **Writing Orders**

(1) JP 5-00.2 contains guidance on order preparation and a sample OPORD format. Some excerpts are:

(a) “Preparation of the order is not a sequential process; instead, whenever possible, it is done concurrently with the components. The same is true for development of the TPFDD [time-phased force and deployment data].”²⁰⁴

(b) “Although not required in present OPLAN [operation plan] and OPORD formats, a combat identification appendix to Annex C of the JTF OPORD, OPLAN, or campaign plan outlining CJTF policy and guidance for JTF combat identification would provide a basis for combat identification within the JOA.”²⁰⁵

(c) “JTF’s OPORD normally will be based on the JTF’s establishing authority’s (supported combatant commander’s) OPORD.”²⁰⁶

(2) Appendix B, “OPLAN Development Sample Annex E — “Personnel”,” in JP 1-0 provides administrative instructions and a format for developing the personnel annex to an OPLAN. The format addresses, among other items, the concept of personnel support, personnel policies

and procedures, finance and disbursing, legal, military postal services, and chaplain activities.

(3) Appendix D, “Logistic Checklist for OPLANs,” in JP 4-0 “cover[s] areas of consideration that should be addressed in Annex D of OPLANs.”²⁰⁷ The checklist items cover, among other items, considerations for plan coordination with subordinate organizations, supplies, personnel movement, construction, petroleum, munitions, medical, sustainability, and transportation.

(4) Appendix A, “Joint Air Operations Plan Format,” in JP 3-56.1 provides a format and guidance for writing each paragraph of the joint air operations plan.

(5) Appendix E, “Sample Base Defense Plan,” provides guidance and a detailed format for developing a base defense plan.

(6) Appendix A, “Airspace Control Plan,” in JP 3-52 provides “topics that should be considered when developing an airspace control plan.”²⁰⁸

f. **Information Management**

(1) “**Information System**—The organized collection, processing, transmission, and dissemination of information, in accordance with defined procedures, whether automated or manual. . .”²⁰⁹

(2) “The following is a checklist of personnel related activities the J-1 should consider in planning and executing operations. MANAGING THE FORCE 1. Does an information management system exist for the JTF J-1 that allows summation of separate Service personnel status reports, including authorized, assigned, and deployed strengths; critical personnel shortages; casualty accounting; and personnel requisitions?”²¹⁰

(3) “An important consideration in the dissemination process is management of information transmitted over communications systems. JFCs should ensure for provision of critical, time-sensitive intelligence for force protection and operations, using the “push-pull” system to receive finished intelligence products from higher or adjacent commanders and intelligence producers. JFCs should manage information dissemination in terms of the product, available communications paths through dynamic bandwidth management, and time sensitivity to ensure the joint force receives what is required to support joint operations. Intelligence dissemination should be continuously reviewed throughout the joint operation.”²¹¹

- (4) “CCIR are a comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management and the decision making process that affect successful mission accomplishment.”²¹²
- (5) “SOJ6. . . Provide information management between the JFSOCC and theater and defense communications systems.”²¹³
- (6) “The voice, data, and information management systems used to support DOD CD [counterdrug] operations primarily consist of ten systems. . . National Communications System. . . Global Command and Control System. . . Department of Defense Intelligence Information System. . . Defense Switched Network. . .”²¹⁴
- (7) “UNDHA’s [United Nations Department of Humanitarian Affairs] capabilities include the following: . . . To maintain centralized information management systems for humanitarian emergencies (the International Emergency Readiness and Response Information System and the Humanitarian Early Warning System).”²¹⁵
- (8) “To support the synchronization of fires, C4I [command, control, communications, computers, and intelligence] must be responsive to the user, and be capable of real time information management and data processing.”²¹⁶
- (9) “Military forces fulfill their role in maintaining our national security by preparing for and, if necessary, conducting joint operations across the range of military operations . . . The Joint Operation Planning and Execution System (JOPES) defines the functions, planning systems, and information management tools for accomplishing these tasks.”²¹⁷
- (10) “MEPES [Medical Planning and Execution System] is programmed to be the medical module in JOPES. It is an operational information management system that provides the Joint Staff, combatant commands, and component commands the capability to analyze and evaluate alternative courses of action (COAs) for allocation of health service resources.”²¹⁸
- (11) “SORTS [Status of Resources and Training System] is an information management system designed to support the decisionmaking process of the NCA and Chairman of the Joint Chiefs of Staff.”²¹⁹
- (12) “Command is as much a problem of information management as it is of carrying out difficult and complex warfighting tasks.”²²⁰

(13) “NTCS-A [Navy Tactical Command System-Afloat (NTCS-A)] is the afloat segment of the command information system architecture and is GCCS COE [common operating environment]-compliant. It provides the tactical commander with timely, accurate, and complete all-source information management, display, and dissemination capabilities.”²²¹

g. **COA Development and Analysis**

(1) JP 5-0 provides a summary of actions surrounding COA development and analysis for both deliberate and crisis-action planning in Chapter III, “Joint Operation Planning and execution.” Some excerpts are:

(a) “During step two [of deliberate planning], alternative COAs are developed and distributed for staff estimates of supportability to be completed in step three. In step four, alternative COAs are war-gamed, analyzed, and compared to produce a commander’s estimate containing the commander’s decision on the preferred COA. The selected COA is then expanded into the CINC’s Strategic Concept that is submitted to the Chairman of the Joint Chiefs of Staff for review and approval.”²²²

(b) “The COA development phase of crisis action planning implements an NCA decision or CJCS planning directive to develop military options. In response to that decision, the Chairman of the Joint Chiefs of Staff issues a planning guidance directive to the supported commander directing the preparation of COAs. . . If the NCA direct development of a specific COA, the directive will describe the COA and request the supported commander’s assessment. In response to the directive, the supported commander, with the support of subordinate and supporting commanders, develops and analyzes COAs. Joint operation plans are reviewed for applicability and used when needed. Based on the combatant commander’s guidance, supporting commanders, subordinate joint force commanders, and component commanders begin TPFDD development. Time permitting, a TPFDD is generated for each COA. USTRANSCOM reviews the proposed COAs and prepares deployment estimates. The Services monitor the development of COAs and begin planning for support forces, sustainment, and mobilization. The supported commander analyzes the COAs and submits his recommendations to the NCA and the Chairman of the Joint Chiefs of Staff. The supported commander’s estimate describes the selected COAs, summarizes the supported commander’s evaluation of the COAs, and presents recommendations. The COA development phase of crisis action planning ends with the submission of the supported commander’s estimate.”²²³

(2) “JP 5-00.2 contains subparagraphs for COA development, COA analysis, COA comparison, and COA selection. Some excerpts are:

(a) “A complete COA consists of the following information: **what** type of action; **when** the action begins; **where** the action takes place; **why** (commander’s intent); and **how** (method of employment of forces). Figure IX-17 is a graphical depiction of the COA development process.”²²⁴

(b) “Each critical event within a proposed COA should be wargamed based upon time available using the action, reaction, counteraction method of Blue/opposition force interaction.”²²⁵

(c) “During the analysis, each staff section and component ranks the COAs and briefs their reasons for ranking.”²²⁶

(d) “Using a decision support template, points- based decision matrix, or other types of decision making tools, a selection is made of the best COA to be recommended to the CJTF.”²²⁷

(e) “ROE [rules of engagement] issues must be considered during COA development, wargaming, analysis, and selection. The supported combatant commander may provide ROE guidance to the CJTF via the initial planning documents, which precede COA development. The CJTF’s proposed supplemental ROE should be developed, exercised, and modified, as necessary to support mission planning, during the COA development, wargaming, analysis, and selection processes. Mission objectives must drive the ROE formulation process and not vice versa.”²²⁸

(3) Appendix A, “The Personnel Estimate,” of JP 1-0 contains guidance in developing a personnel estimate during COA development and analysis. It includes personnel estimate procedures and a suggested format/checklist. Some excerpts are:

(a) “Staff estimates are the foundation for the commander’s decision to select a COA. The staff directorates analyze and refine each COA to determine its supportability. The thoroughness of these staff estimates help determine the success of the military operation.”²²⁹

(b) “The J-1 assists the commander in reaching a decision by estimating whether a particular operation or mission is supportable from a personnel perspective. The personnel estimate process is applicable to any operational situation and to any level of command. It is used in both the deliberate and CAP [crisis action planning] processes.

(c) “During the personnel estimate process, the J-1 will:

- Review the mission and situation — mission, enemy, terrain and weather, time, troops available and civilian (METT-TC) considerations — from a personnel perspective;
- Identify the decision criteria which relate to the personnel arena; • Analyze these decision criteria with respect to each COA, identifying advantages and disadvantages from a personnel point of view;
- Compare COAs to one another based on advantages and disadvantages of each. Use a worksheet or matrix, if helpful, to display advantages and disadvantages and analyze their relative merits; and
- Conclude whether the mission can be supported and which COA can best be supported.”²³⁰

(4) Appendix D, “Intelligence Estimate,” in JP 2-01, “Joint Intelligence Support to Military Operations,” provides a format and guidance for developing the intelligence estimate paragraphs.

(5) “The concept of logistic support should derive from the estimate of logistic supportability of one or more courses of action (COAs). The CINC’s directorate for logistics prepares these estimates for each alternative COA proposed by either the operations or planning directorate. The estimate of logistic supportability for the selected COA, along with the logistic system framework considerations outlined above may be refined into the concept of logistic support for an operation or campaign.”²³¹

h. **Commander’s Estimate Process**

(1) **JP 3-0** addresses mission analysis, mission statement, situation analysis, COA analysis, analysis of opposing COAs, comparison of own COA’s, and the commander’s decision in Appendix B, “The Estimate Process,” (three pages). Typical guidance in Appendix B includes:

(a) “The **estimate process** is central to formulating and updating military action to meet the requirements of any situation. The estimate process should be used by commanders and staffs at all levels. Though its central framework for organizing inquiry and decision is essentially the same for any level of command, specific

detailed questions within each part of this framework will vary depending on the level and type of operation.”²³²

(b) During **mission analysis** “Determine specified and implied tasks. If multiple, determine priorities.”²³³

(c) “**Assumptions** are intrinsically important factors on which the conduct of the operation is based and must be noted as such.”²³⁴

(d) “Each **COA** must be adequate, feasible, and acceptable.”²³⁵

(e) “Determine the probable effect of possible enemy COAs on the success of each friendly COA.”²³⁶

(f) “Translate the selected COA into a concise statement of what the force, as a whole, is to do and explain, as may be appropriate, the following elements: when, where, how, and why.”²³⁷

(2) “Using the intelligence estimate as a basis, the J-2 participates in the JFC’s decision making and planning processes from the time that operations are first contemplated or directed until the completion of the operation. The JFC and the J-2 must conduct a continuous dialog concerning the adversary’s relative ability to prevent the joint force from accomplishing its mission.”²³⁸

(3) “Upon receipt of the warning order or other directive requiring the planning for an amphibious operation, CATF [commander, amphibious task force] conducts a thorough review of the mission and other information provided therein. As necessary, studies and initial estimates are prepared at both the LF [landing force] and ATF [amphibious task force] levels. These estimates provide information required to support the basic decisionmaking process and for the detailed planning that follows.”²³⁹

i. **Boards and Agencies [Centers and Cells]**

(1) **JP 5-00.2** contains a diagram of a typical JTF staff organization. It illustrates the numerous boards, centers, and cells the CJTF can form to assist in C2. The list includes, among others, the joint information bureau, joint patient movement requirements center, joint personnel reception center, joint intelligence support element, joint document exploitation center, joint interrogation and debriefing center, joint captured material exploitation center, logistics readiness center, joint movement center, joint facilities utilization board, joint search and rescue center, ROE cell, joint operations center, IO cell, civil-military operations center, and joint targeting coordination board. Throughout

the publication explanations of the purpose and functions of each organization are provided.

(2) Appendix F, “Joint Reception Center and Joint Personnel Training And Tracking Activities,” in JP 1-0 addresses the primary function of the **joint reception center**.

(3) JP 2-0 provides a major paragraph on the **joint intelligence center (JIC) and joint intelligence support elements (JISE)**. These organizations are discussed from the perspective of the National, theater, and subordinate joint force level. Some excerpts are:

(a) “The JIC concept fuses the main support capabilities of all Service, Combat Support Agency, and combat units into a one stop shopping center for intelligence support.”²⁴⁰

(b) “The JIC/JISE is, by design, scalable and can expand to meet the needs of the JFC.”²⁴¹

(4) “**The C3IC [Coalition Coordination, Communications, and Integration Center]** was specifically established [during Operation DESERT STORM] to facilitate exchange of intelligence and operational information, ensure coordination of operations among coalition forces, and provide a forum where routine issues could be resolved informally and collegially among staff officer.”²⁴²

(5) “Typically, **JFCs organize a JTCCB** and, if the JFC so designates, the JTCCB may be either an integrating center to accomplish the broad targeting oversight functions, or a JFC-level review mechanism.”²⁴³

(6) “The JFC may approve the formation within the J-3 of a **joint fires element (JFE)**. The JFE is an optional staff element that provides recommendations to the J-3 to accomplish fires planning and coordination.”²⁴⁴

(7) JP 3-13 devotes a major portion of Chapter IV, “Information Operations Organization,” to describing the **IO cell** functions and membership. Some excerpts are:

(a) “The IO cell, in coordination with other elements of the joint force staff, develops and promulgates campaign or operation IO guidance for plans that is passed down to the components or subordinate JTFs for decentralized execution.”²⁴⁵

(b) “The JFC normally will assign responsibility for IO to a member of the joint staff, usually the Operations officer (J-3). When authorized,

the J-3 will have primary staff responsibility for planning, coordinating, and integrating joint force IO.”²⁴⁶

(8) “The **JSRC** is a primary search and rescue facility suitably staffed by supervisory personnel and equipped for planning, coordinating, and executing joint CSAR operations within the geographical area assigned to the joint force. The JFC may task Service and special operations component members of a joint force to participate in the operation of the JSRC. The facility is operated jointly by personnel from two or more Service or functional components or it may have a multinational staff of personnel from two or more allied or coalition nations (multinational search and rescue center).”²⁴⁷

(9) **Appendix B, “Organization and Functions of Combatant Command Logistic Staff (J-4) and Functions of Joint Logistic Centers, Offices, and Boards,” in JP 4-0** addresses, among other things, logistics offices, centers, and boards that include the joint transportation board, joint movement center, logistic staff officer for petroleum and subarea petroleum office, joint civil-military engineering board, joint facilities utilization board, CINC logistic procurement support board, theater patient movement requirements center, joint blood program office, joint mortuary affairs office, and joint materiel priorities and allocation board.

(10) “Therefore, the JFC depends on network and nodal control centers (e.g., **Joint Communications Control Center (JCCC)**) to provide the technical direction essential to maintain effective C2.”²⁴⁸

j. **Information Fidelity**. This term is not used but there are numerous references in approved and draft joint doctrine about the need for **accurate and timely information** in general and specifically, information regarding isolated personnel; deploying personnel, equipment, and supplies; nuclear weapons release; airspace control; targets; press releases; early warning; and intelligence on the battlespace.

8. **Organization of the Theater, Area, or Battlespace (Operational Areas)**

a. **JP 3-0** devotes a major paragraph covering three pages and containing two figures to discuss and illustrate the organization of an operational area. The paragraph includes descriptions of the joint operations area, joint special operations area (JSOA), joint rear area, amphibious objective area (AOA), area of operations, area of interest, theater of war, theater of operations, and combat and communications zones. The figures illustrate the relationships between each type of area or zone. JP 3-0 goes further by devoting another major paragraph to control and coordinating measures. That paragraph acknowledges that “**JFCs employ various maneuver and**

movement control and fire support coordinating measures to facilitate effective joint operations.²⁴⁹ It includes discussion on boundaries and the fire support coordination line.

b. The JTF establishing authority responsibilities include: “Defining the joint operations area (JOA) in terms of geography and/or time. (Note: The JOA should be assigned through the appropriate combatant commander and activated at the date and time specified.)”²⁵⁰ Figure II-2 in JP 5-00.2 illustrates the JTF organizational areas.

c. **JP 3-05** explains that “For operations somewhat limited in scope and duration, the **JFC may establish a joint special operations area (JSOA)**. A JSOA is an area of land, sea, and airspace, defined by a JFC who has geographic responsibilities, for use by a JFSOCC (or JSOTF) for the conduct of SO. JFCs may use a JSOA to delineate and facilitate simultaneous conventional and special operations in the same general operational area. When a JSOA is designated, the JFSOCC (or JSOTF) is the supported commander within the designated JSOA.”²⁵¹

d. **JP 3-10.1** provides a figure illustrating a notional geographic organization of the JRA.

9. Command and Control Systems (Information Systems)

a. C2 Systems and Their Relationship to the JFC’s C2 Process

(1) **JP 6-0** was developed to “addresses how C4 systems support the commanders of joint forces in the conduct of joint operations, including, in general terms, how systems are to be configured, deployed, and employed.”²⁵² Chapter I, “Introduction,” addresses among other thing the role of C4 systems in C2, processing information, the relationship between information and the C2 support system, functions of C4 systems, objectives of C4 systems, and basic doctrine for C4 systems. Other chapters address decision support systems, the National Communications System, Defense Information Systems Network, Global Command and Control System, and the National Military Command System. Some key principles discussed include:

(a) “The C2S [command and control] system gives the joint force commander (JFC) the means to exercise authority and direct assigned and attached forces in the accomplishment of the mission. **The JFC uses information to support decisionmaking and coordinate actions** that will influence friendly and enemy forces to the JFC’s advantage.”²⁵³

(b) “Information integrates joint force components, allowing them to function effectively across vast distances. Therefore, the structure of the joint force drives specific information flow and processing requirements. The information requirements of the joint force drive the general architecture and specific configuration of the C2S system.”²⁵⁴

(c) “Data is gathered in a variety of ways—from sensors (both active and passive), from C4 systems, and through situation reports from senior, subordinate, or lateral commands. Information needs to be interpreted and correctly applied to be of use and is valuable only insofar as it contributes to knowledge and understanding. Warfighters understand things best in terms of ideas or images; a clear image of their commander’s intent and of the local situation can allow subordinates to seize the initiative. In this regard, C4 systems play a critical role in the processing, flow, and quality of data to support information requirements throughout the joint force.”²⁵⁵

(d) “C4 systems support the following functions: . . . **Collect**. . . **Transport**. . . **Process**. . . **Disseminate**. . . **Protect**. . .”²⁵⁶

(e) “C4 systems should help a military force and its supporting elements to combine the thoughts and impressions of multiple commanders and key warfighters. This allows the views of many experts to be brought to bear on any given task.”²⁵⁷

(f) “C4 systems must be planned as extensions of human senses and processes to help people form perceptions, react, and make decisions. This allows people to be effective during high-tempo operations. C4 systems must be immediately responsive, simple, and easily understandable, especially for systems planned for use during situations involving great stress.”²⁵⁸

(g) “C4 systems must be able to respond quickly to requests for information and to place and maintain the information where it is needed. This not only reduces critical delays but also reduces the impact on communications networks. . . The ultimate goal of C4 systems is to produce a picture of the battlespace that is accurate and meets the needs of warfighters. This goal is achieved by fusing, i.e., reducing information to the minimum essentials and putting it in a form that people can act on. There is no one fusing of information that meets the needs of all warriors. However, with concise, accurate, timely, and relevant.”²⁵⁹

(2) **JP 6-02, “Joint Doctrine for Employment of Operational/Tactical Command, Control, Communications, and Computer**

Systems,” provides doctrinal guidance to those who plan, manage, and employ C4 systems. Chapter IV, “C4 Systems and Support,” includes thorough descriptions of numerous Defense-wide and joint C4 systems and Service C4 systems. Other pertinent excerpts include:

(a) **“As driven by the mission, the foundations of the C4 system are laid by the C2 organization of forces assigned to the JFC.**

Specific command relationships and the organization of units, staffs, and battlespace drive the interconnecting communications methods and means. C4 systems must support this C2 organization in a complementary fashion and, as indicated in Figure I-1, C4 systems must provide for the uninterrupted flow of information to and from commanders at all levels.”²⁶⁰

(b) “It is crucial that commanders and staff planners are sensitive to internal and external changes in their C2 organization. Changes in levels of authority, the type of command relationships or other authorities, e.g., direct liaison authorized, all effect the overlaying C4 system.”²⁶¹

(c) “Multinational organizations present special challenges. C4 planners must ensure that communications links are established with non-US and host-nation commanders. C4 interoperability is essential and can be accomplished through several means, including equipment interoperability, standardization, training, and liaison officers. The requirement for translators or other translation capabilities may become significant.”²⁶²

(3) “Effective command, control, communications, computer systems, and intelligence (C4I) are vital to **planning, initiating, conducting, sustaining, and protecting** a successful joint operation. Logistic, operations, and intelligence functions all depend on responsive C4I, the **central system tying together all aspects of joint operations** and allowing commanders and their staffs to initiate, direct, monitor, question, and react. Integrating logistic and operational command, control, communications, and computers (C4) systems is essential. Logistic C4 needs should be included in the operation’s C4I system plans.”²⁶³

(4) “The principal support that C4I will provide for passive defense is warning.”²⁶⁴

(5) “The JFC exercises control of active defense operations by integration of JTMD systems and forces into the C4I systems supporting theater/JOA air defense.”²⁶⁵

(6) “The JRAC must have interoperable, secure, reliable, flexible, and survivable intertheater and intratheater networks in order to accomplish the mission. Existing military or commercial communications systems will be used to the maximum extent possible. However, additional communication systems may be required to reconfigure or expand the network.”²⁶⁶

(7) “The JSRC and component RCCs require dedicated communications equipment to perform the extensive coordination required in most CSAR operations. Communications equipment required by the JSRC and component RCCs include radios (including satellite communications [SATCOM]) and landlines. If the joint force and/or component headquarters are employing a computer network to communicate between staff sections, the JSRC and component RCCs should also have this capability.”²⁶⁷

(8) Chapter IV, “Intelligence C4 Systems Support,” in **JP 2-01** provides information and guidance on intelligence communications capabilities, multinational force intelligence and communications interoperability, establishing intelligence communication system requirements, combatant commander’s communications planning, communications and intelligence systems, communications and ADP (automatic data processing) systems and networks, and other communications resources.

(9) Chapter V, “Command, Control, and Communications [C3] Systems Support Planning,” in **JP 3-02, “Joint Doctrine for Amphibious Operations,”** provides guidance on, among other subjects, communications support requirements, C3 planning considerations, C3 during each phase of the amphibious operations to include preassault operations, and C3 plan.

b. **C2 Systems and Weapon systems C2 Systems.** “C2 systems bring all information together for collation and decision making. C2 systems, personnel, equipment, and a variety of related procedures support the execution of joint fire support missions. Unity of effort is key to the effective coordination of joint fire support. Vertical and horizontal coordination is also essential for effective joint fire support. For this reason, Service and functional components provide a hierarchy of fire support coordinators, fire support coordination agencies, and liaison officers. These fire support coordinators have one goal in common — to efficiently direct the use of fire support to accomplish the mission.”²⁶⁸

c. **Relationship between C2 systems (video teleconferencing (VTC), Home Page) and process (fragmentary order)**

(1) “**JWICS [Joint Worldwide Intelligence Communications System]** incorporates advanced networking technologies that permit greater throughput and capacity, making possible the use of applications that take advantage of multimedia technologies including **video teleconferencing**.”²⁶⁹

(2) “**Defense Information Systems Network.** Integrated network, centrally managed and configured to provide long-haul information transfer services for all DOD activities. It is an information transfer utility designed to provide dedicated point-to-point, switched voice and data, imagery, and **video teleconferencing services**.”²⁷⁰

(3) “**Joint forces require secure video teleconferencing,** data base connectivity, direct downlink, and broadcast/receive capabilities for reachback access to intelligence, logistics, and other essential support data.”²⁷¹

(4) “**fragmentary order**—An abbreviated form of an operation order, usually issued on a day-to-day basis, that eliminates the need for restating information contained in a basic operation order.”²⁷²

(5) “JFCs prescribe standardized cryptologic and authentication procedures in the joint force operation order, and distribute updated instructions via the ATO/**special instructions and fragmentary orders** to the JFC’s operation order.”²⁷³

10. **Other**

a. **Coalition C2 Guidance** Most of the guidance has been described in the previous paragraphs labeled “Multinational Considerations,” however, some additional excerpts are provided as follows:

b. **Interagency C2 Guidance**

(1) **JP 3-08 Vol I** is designed to provide guidance on coordination between the combatant commands and agencies of the US Government, private voluntary organizations, and regional and international organizations during joint operations. It specifically addresses interagency coordination at the National level, when forming a JTF, coordination with State and Local authorities and during foreign operations; command relationships; organizing for success at the operational level; information management; JTF mission analysis; JTF

organizational tools; and the civil-military operations center. Some excerpts are:

(a) “**Obtaining coordinated and integrated effort in an interagency operation should not be equated to the command and control of a military operation.** The various agencies’ different — and sometimes conflicting — goals, policies, procedures, and decision-making techniques make unity of effort a challenge. Some NGOs and PVOs may, in fact, have policies that are purposely antithetical to both the military and government agencies. Additionally, there is no overarching interagency doctrine that delineates or dictates the relationships and procedures governing all agencies, departments, and organizations in interagency operations. Nor is there an overseeing organization to ensure that the myriad agencies, departments, and organizations have the capability and the tools to work together. **The interagency process is often described as “more art than science,” while military operations tend to depend on structure and doctrine.** However, some of the techniques, procedures, and systems of military command and control (C2) can assist in obtaining unity of effort if they are adjusted to the dynamic world of interagency operations. Unity of effort can only be achieved through close, continuous interagency and interdepartmental coordination and cooperation, which are necessary to overcome confusion over objectives, inadequate structure or procedures, and bureaucratic and personal limitations. In summary, action will follow understanding.”²⁷⁴

(b) “The HOC [humanitarian operations center] does not exercise command and control. Rather, its purpose is to achieve unity of effort through coordination and effective concentration of resources, implemented by the individual organizations in accordance with their own operational practices. It limits or eliminates interference in executing the mission and avoids working at cross-purposes.”²⁷⁵

(2) “ In certain situations, interagency coordination must be a top priority of the CJTF. During interagency operations, the JTF HQ must provide the basis for a unified effort, centralized planning and decentralized execution. It is the operational focal point for interagency coordination.”²⁷⁶

(3) “In addition to USIA [United States Information Agency], **PSYOP should be coordinated with other USG agencies**, including, but not limited to, the Central Intelligence Agency; Board for International Broadcasting; Departments of State, Commerce, Transportation, Energy, and Justice; Drug Enforcement Administration; and the US Coast Guard.”²⁷⁷

c. **Interface of Civil Command Structure with JFCs**

(1) “DOD interaction with state and local authorities can take the very visible form of MSCA [military support to civilian authorities] or the more routine involvement of commanders of DOD installations with state, county, and municipal governments.”²⁷⁸

(2) “Federal support to law enforcement agencies can be coordinated with the state or territory Adjutant General, the OES [office of emergency services], or principal law enforcement agency, depending on the nature and magnitude of the operation.”²⁷⁹

(3) **JP 3-10.1** addresses coordination of base defense with nonmilitary agencies and advises that: “Commanders must establish C2 measures to integrate the defensive capabilities and defense requirements of civilian agencies of the US and HN governments. Private contractors also may require security. Defense-related resources of these agencies may include police, fire departments, private security guards, observers, and mechanical or electrical security systems. Integration may be accomplished by memorandums of understanding or similar instruments that set forth the requirements and capabilities of all participating organizations.”²⁸⁰

d. **C2 and nontraditional/asymmetric operations (Military Operations Other Than War (MOOTW))**

(1) **JP 3-07, “Joint Doctrine for Military Operations Other Than War [MOOTW],”** provides some general C2 guidance. It includes:

(a) “No single C2 option works best for all MOOTW. JFCs and their subordinates should be flexible in modifying standard arrangements to meet specific requirements of each situation and promote unity of effort.”²⁸¹

(b) “There are several options that may be employed for the C2 of multinational forces; however, planners must be prepared to extend a communications umbrella over the multinational force. Effective options for C2 of multinational forces include:

- In the **lead nation option**, a nation agrees to take the lead in the accomplishment of an international mandate. . .

- The **parallel option** allows multinational partners to retain greater operational control of their forces. The mandating organization (e.g., UN) selects a commander for the force. A staff,

proportionally representing all contributing nations, is assembled on an ad hoc basis. The force commander has operational control of forces of the multinational partners, but generally to a lesser degree than that exercised in the lead nation option.

•• The **regional alliance option** depends on the ability of regional nations to lead a coalition effort. Regional alliance C2 approaches may also hinge on the influence exerted by a nation in a regional leadership position. Existing alliances may serve as a basis for C2 of forces involved in MOOTW. For example, the C2 structure of NATO was designed for war, but may also be effective in MOOTW.”²⁸²

(2) Chapter II, “Organization and Responsibilities for Foreign Internal Defense (FID),” in **JP 3-07.1, “JTTP for Foreign Internal Defense,”** provides guidance on organizing for FID in combatant commands including the staff and FID Advisory Committee, subunified commands, and JTFs. Additionally, formats and guidance on preparing CA and PSYOP estimates of the situation are provided in Appendixes.

(3) **JP 3-07.4** contains numerous references to command and control subject areas. Major discussions or detailed illustrations are provided on counterdrug organizations; organizational relationships, C4 systems to include military C2, DOD-law enforcement agency C2, and communications; a counterdrug plan format; and communications systems. Some excerpts are:

(a) “The C2 relationships established for CD [counterdrug] operations will vary based on the environments in which they are conducted. Considering that most DOD CD operations are in support of either HNs or LEAs [law enforcement agencies], it is important to remember that even though command of US Military forces will remain within the Department of Defense, the overall control of the mission may be determined by other agencies. The objective is to integrate communications and, most importantly, liaison sufficiently to support operational coordination, the effective sharing of information, and efficient use of assets.”²⁸³

(b) “A common superior commander is responsible for determining the basis on which subordinate commanders will exercise C2 and for clearly assigning responsibilities, authorities, and command relationships for subordinates.”²⁸⁴

(c) “The US military or LEAs and HNs command their respective units and normally work in cooperation with, but not under the OPCON of, each other. The degree of C2 that US forces could

exercise over HN forces (and vice versa) depends on the location, tactical situation, political environment, and existing agreements.”²⁸⁵

(d) “Secure communications should be used to the maximum extent possible in support of CD operations.”²⁸⁶

(e) “**CD operations require centralized command and decentralized execution.** Centralized command allows for the establishment of a clear focus on the objectives, while decentralized execution provides the tactical commander with the flexibility to adapt to the situation as it develops.”²⁸⁷

(4) **JP 3-07.5** devotes an entire chapter to C2. It addresses, among other subjects, command relationships, NEO chain of command, and JTF organization. Some examples are:

(a) “Within the country, the Ambassador has been designated as the responsible authority for the operation. Subject to the overall authority of the Ambassador, responsibility for the conduct of military operations in support of an evacuation and security of personnel, equipment, and installations within the JOA is vested with the JFC.”²⁸⁸

(b) “All necessary orders from either the Ambassador or JFC to corresponding personnel are, insofar as possible, issued through the appropriate chain of command.”²⁸⁹

e. **Database management/Control/Authority to Change.** “Production management is a critical element in ensuring effective and efficient military intelligence production in support of joint operations. . . Automated data processing (ADP) on-line updates are controlled by the production manager. **Strict controls should be applied to changing information in ADP systems** that can be accessed by other organizations. There must be a designated approving authority for such changes. Routinely, only one organization will have the authority to change a specific item (e.g., a data field in a record in an official data base).”²⁹⁰

f. **Definitions**

(1) “**Commander’s Critical Information Requirements (CCIR).** A comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management and the decision making process that affect successful mission accomplishment.”²⁹¹

(2) The definitions for COP and common tactical picture (CTP) are not contained in approved publications.

SECTION B: DRAFT JOINT DOCTRINE

1. **General.** JPs 3-01, “Joint Doctrine for Countering Air and Missile Threats”(final coordination (FC)), 3-07.6, “JTTP for Foreign Humanitarian Assistance” (preliminary coordination (PC)), 3-16, “Joint Doctrine for Multinational Operations” (FC), and 3-18, “Joint Doctrine for Forcible Entry” (PC), all devote at least a chapter to command and control or a related subject such as organization or command relationships. Additionally, JP 3-16 (FC) was designed, in part, to address a unique C2 issue. The following paragraphs outline some of the key principles contained in them and significant portions of other draft JPs.

2. C2 Description and Theory

a. **Basic Definitions.** The draft publications do not identify new or modify existing basic C2 definitions

b. **Basic Tenets.** The basic tenets of C2 are built-in or repeat those in approved joint publications.

c. C2 Decisionmaking Model [Process]

(1) “Commanders and staff use the decision making process to select a COA and develop an operations plan (OPLAN) or operations order (OPORD) that implements it. The decision making process is a dynamic and continuous process. The staff continues to estimate the situation as the operation progresses, adapting the command’s COA to unforeseen changes in the situation. The JIPB [joint intelligence preparation of the battlespace] which supports the decision making process must also remain dynamic, constantly integrating new information into the initial set of facts and assumptions.”²⁹²

(2) **JP 3-35, “Joint Deployment and Redeployment Operations” (PC)**, contains a description of the deliberate and crisis action planning process in Appendix A. It has paragraphs on JOPES, deliberate planning, crisis action planning, and a figure illustrating a summary of both processes.

(3) Chapter II, “Campaign Planning Process,” in JP 5-00.1, “JTTP for Joint Campaign Planning,” contains two paragraphs that discuss campaign planning and JOPES and theater planning actions.

d. **Warfighting Model.** No direct references were discovered.

3. **Theater/JFC-level C2**

a. **Relationship of C2 Decisionmaking model to JFC's C2 Tasks**

(1) "BDA [battle damage assessment] is crucial to the decision making process and influences current and future military operations."²⁹³

(2) "Although JIPB support to decision making is both dynamic and continuous, it must also be "front loaded" in the sense that the bulk of JIPB analysis must be completed early enough to be factored into the JFC's decision making effort. (Figure III-1) The joint force J-2 and J-3 work together to ensure all JIPB products and analyses are fully integrated into the joint force's operational planning. They accomplish this through wargaming friendly versus adversary COAs, and by mutually developing products designed to assist the JFC's decision making process."²⁹⁴

(2) "**joint intelligence preparation of the battlespace.** The analytical process used by joint intelligence organizations to produce intelligence assessments, estimates and other intelligence products in support of the joint force commander's decision making process. . . Joint intelligence preparation of the battlespace products are used by other staff elements in preparing their estimates and are also applied during the analysis and selection of friendly courses of action."²⁹⁵

(3) "Lessons learned from Operations DESERT SHIELD and DESERT STORM demonstrated that the speed of modern warfare dictates that commanders receive timely, pertinent, and accurate information to support them in the decision making process."²⁹⁶

b. **Theater-level C2 Structure**

(1) Chapter II, "Command and Control," in JP 3-01 (FC) addresses the JFC, JFC's staff, JTCCB, JFACC, JAOC, AADC, ACA, component commanders, multinational considerations, and C4I requirements. Some excerpts are:

(a) "The JFC normally exercises control of joint counterair through the joint force air component commander (JFACC)."²⁹⁷

(b) "The JFC's staff assists the JFC in the decision making and execution process. The staff's sole function is command support, and its only authority is delegated to it by the JFC. The staff oversees

and executes plans, monitors, advises, and coordinates the responsibilities of the JFC . . . ”²⁹⁸

(d) “The JFC will normally designate a JFACC to integrate the capabilities and command and control (C2) of joint air assets. . . The responsibilities of the JFACC, AADC, and airspace control authority (ACA) are interrelated and should normally be assigned to one individual.”²⁹⁹

(e) “A joint air operations center (JAOC) normally functions as the JFACC’s principal operations center. It links with national and theater sensors, intelligence, communications, and component operations centers.”³⁰⁰

(g) “The ACA coordinates through the ACP the use of the airspace, including integration with the host nation and deconfliction of user requirements.”³⁰¹

(2) **Common Operational Picture**

(a) “The COP is a graphical display of friendly, hostile, and neutral units, assets, overlays, and/or tracks pertinent to operations and is a key tool for commanders in planning and conducting joint operations. The GCCS COP may include relevant information from the tactical to the strategic level of command. The system currently includes geographically oriented data, with planning data from JOPES and readiness data from the Status of Resources and Training System envisioned for future inclusion.”³⁰²

(b) “Execution of air defense operations requires continuous surveillance of the theater and/or JOA. Integration of sensors provides a complete, timely, and **common operational picture**.”³⁰³

c. **Alternate to Chain of Command/C2 Nodes**

(1) “A JFC may establish and task a JTF- level organization within the staff to accomplish broad targeting oversight functions. This organization is usually called a **joint targeting coordination board** (JTCB). The JTCB functions as the review and integration center for JTF targeting efforts. The JTCB is a joint activity composed of representatives from the JTF staff, the components and, if required, their subordinate units.”³⁰⁴ (See Figure I-2.)

(2) “The supported combatant commander may establish a HACC [**Humanitarian Assistance Coordination Center**] to assist with interagency coordination and planning.”³⁰⁵

(3) “Combatant commanders, and subordinate commands, may form **LRCs or Logistics Operations Centers** to monitor and coordinate the theater logistics effort.”³⁰⁶

d. **JFC’s Role as Synchronization of Component’s Execution**

(1) **JP 3-18 (PC)** devotes an entire chapter to synchronization. It addresses synchronization considerations during each phase of a forcible entry operation. Additionally, it advises that: “In order to synchronize and confirm the timing of an operation, the JFC may choose to rehearse the operation plan.”³⁰⁷

(2) “The MNFC is responsible for synchronizing the efforts of the land, air, and maritime components to achieve successful mission accomplishment.”³⁰⁸

(3) “In order to most effectively synchronize operations, the MNFC will establish supported and supporting relationships among forces.”³⁰⁹

e. **Multinational Considerations**

(1) **JP 3-16 (FC)** provides Chapter II, “Command Relationships” for the discussion of C2 in a multinational operation. It contains major paragraphs on the multinational force commander, control of multinational operations, and civil-military coordination. Some excerpts are:

(a) “MNFC is a general term applied to a commander who exercises command authority over a military force composed of elements from two or more nations. The extent of the MNFC’s command authority is determined by the participating nations. This authority could range in degree from command, to directing support relationships, to being the coordinating authority between the various nations, . . . Such authority, however, is seldom absolute. MNFCs unify the efforts of the MNF toward common objectives. Gaining consensus is the most an important aspect of decision making in multinational operations.”³¹⁰

(b) “There are two key structural enhancements that should improve the control of MNFs: a liaison network and coordination centers.”³¹¹

(c) “In many operating environments, the MNF interacts with a variety of entities requiring unified actions by the geographic combatant commander, including non- military governmental agencies (like US Agency for International Development), NGOs (such

as religious relief agencies), corporations, PVOs (such as the American Red Cross), and international organizations (such as the United Nations). These groups play an important role in providing support to HNs. Though differences may exist between military forces and civilian agencies, short-term objectives are frequently very similar.”³¹²

(2) “The United States US may participate in PO [peace operations] under various C2 arrangements. . . These arrangements might include a:

- Unilateral US operation;
- Multinational operation with the United States as the lead nation; And/or
- Multinational operation with the United States as a participant or in support.

In any of these arrangements, US forces will report to the US NCA. However, in multinational PO, US forces may also report to the sponsoring organization such as the UN, NATO, OAU [Organization of African Unity], and/or OAS [Organization of American States].”³¹³

(3) “When multinational forces are under US control, US commanders need to ensure that those forces interpret the ROE in the same manner as US forces.”³¹⁴

(4) “The JFC should evaluate key considerations and differences involved in planning, coordinating, and conducting counterair operations in a multinational environment.”³¹⁵

f. **Expeditionary Force C2 Outside Theater and En route.** “Transient forces do not come under the chain of command of the area commander solely by their movement across AOR/JOA boundaries. During deployment operations, OPCON of USTRANSCOM intertheater mobility forces operating within the geographic area assigned to a combatant commander does not transfer from USTRANSCOM to the combatant commander. For example, supporting aircraft and crews, Tanker Airlift Control Elements (TALCEs) and Air Mobility Elements remain OPCON to USTRANSCOM. However, transient forces within the assigned AOR of a combatant commander are subject to the area commander’s orders in some instances, e.g., for coordination for emergency defense or allocation of local facilities.”³¹⁶

g. **Effects-based Operations**

(1) “Above all, the commander should specify the desired military end state and the battle results expected, including effects on the enemy and the desired posture of friendly forces at the end of combat operations.”³¹⁷

(2) “The J-2 directly supports the JFC’s responsibilities for determining objectives, directing operations, and evaluating the effects of those operations.”³¹⁸

(3) JP 2-01.1, “JTTP for Intelligence Support to Targeting” (FC), uses the concepts of determining desired effects and assessing effects on targets throughout. It advises that “Assessing the results or effects of operations is as important as determining objectives.”³¹⁹ Additionally, a major paragraph on “munitions effects assessment” is provided.

(4) “The second step in the JIPB process evaluates the effects of the battlespace’s environment on both adversary and friendly military operations.”³²⁰

(5) “Joint forces must be integrated to exploit the mutually beneficial effects of offensive and defensive operations to destroy, neutralize, or minimize air and missile threats, both before and after launch.”³²¹

4. **Command Relationships**

a. **Strategic Level**. JP 3-16 (FC) addresses the National security structure in paragraph 1 of Chapter II, “Command and Control,” and Figure II-1 illustrates the relationships between key members. Specifically, paragraph 1 discusses the roles of the National Command Authorities, Chairman of the Joint Chiefs of Staff, combatant commander, Department of State, Secretary of State, diplomatic missions, the ambassador, political advisor, and country team.

b. **Operational/Tactical Level**

(1) “The JFC will also define the support relationship between the AADC and supporting commanders; however, the AADC is normally the supported commander for theater/JOA-wide DCA [defensive counterair] operations.”³²²

(2) “The JFC determines the most appropriate command authority over forces made available to conduct offensive and defensive counterair. Typically for OCA [offensive counterair], air and naval forces provide air sorties TACON, and land forces provide fire support and attack

helicopters in direct support. Normally, for forces made available to the AADC for DCA, air sorties are provided TACON, while surface-based active defense forces are provided in direct support.”³²³

(3) JP 3-18 (PC) devotes a major paragraph in Chapter II, “Command and Control,” to command relationships for forcible entry operations. It addresses JFC authority, JTF as a subordinate force, forcible entry employing a combination of forces, C2 of SOF, and relationships during planning. Some excerpts are:

(a) “Applicable guidance on command and support relationships among joint force/JTF subordinate commanders will be included in the initiating directive.”³²⁴

(b) “Forcible entry operations employing a combination of airborne, air assault, amphibious, and special operations forces will normally be under the command of the JFC/commander, joint task force (CJTF). Combined forcible entries may be concurrent or integrated. The JFC/CJTF could be either the Commander, Amphibious Task Force (CATF) or commander, airborne/air assault force (CAF).”³²⁵

(c) “Airborne operations conducted in areas adjacent to the AOA are under the C2 of the CJTF, who may or may not be the CATF. The command relationship will be specified in the initiating directive or warning order. Unity of command is paramount to ensure unity of effort by all entry forces.”³²⁶

(d) “The theater SOC normally exercises OPCON of all assigned SOF in theater.”³²⁷

(e) “Operational planning for forcible entry operations can have unique command relationships because OPCON of forces may not be passed to the JFC/CJTF until the forcible entry operation is approved by the commander who issued the initiating directive. Regardless of the status of forces, when the initiating directive is received, special relationships are observed during the planning phase. These planning relationships are designed to ensure that land, air, special operations, and naval force considerations are factored into decisions made concerning the conduct of the forcible entry operation.”³²⁸

c. **Multinational Considerations.** Paragraph 2 (Command and Control of US Forces in Multinational Operations) of Chapter II in **JP 3-16 (FC)** addresses the principles of command relationships in a multinational environment. OPCON, foreign OPCON, TACON, support, coordinating

authority, and chain-of-command are addressed in detail. Some excerpts are:

(1) “The President retains command authority over US forces. This includes the authority and responsibility for effectively using available resources and for planning employment, organizing, directing, coordinating, and controlling, and protecting military forces for the accomplishment of assigned missions.”³²⁹

(2) “. . . a foreign commander cannot change the mission or deploy US forces outside the AOR agreed to by the President. Also, a foreign commander cannot; separate units; redistribute organic supplies (unless previously agreed to in accordance with alliance logistic policies); administer discipline; promote anyone; or change US force internal organization unless agreed to by the NCA.”³³⁰

(3) “The fundamental elements of US command apply when US forces are placed under the OPCON of a foreign commander. US commanders will maintain the capability to report separately to higher US military authorities in addition to foreign commanders.”³³¹

(4) “US force commanders must be apprised of the opportunities, limitations, and/or conditions under which logistic support may be provided to forces of other nations.”³³²

(5) “In many cases, especially those involving NGOs and PVOs, coordinating authority may be the only acceptable means of accomplishing a multinational mission.”³³³

(6) “MNFC is a general term applied to a commander who exercises command authority over a military force composed of elements from two or more nations. The extent of the MNFC’s command authority is determined by the participating nations. This authority could range in degree from command, to directing support relationships, to being the coordinating authority between the various nations, as discussed in paragraph 2 above. Such authority, however, is seldom absolute. MNFCs unify the efforts of the MNF toward common objectives. Gaining consensus is the most important aspect of decision making in multinational operations.”³³⁴

5. **Organization of Joint Forces**

a. **Basic Organizing Principles.** “**Centralized planning** enables the JFC to achieve unity of effort, optimize the use of limited resources, achieve advantageous synergies, and reduce fratricide among all components. It

facilitates the processing and sharing of critical information among all components that improves coordination and deconfliction.”³³⁵

b. **Subordinate Commands**

(1) “The JFC will normally designate a JFACC to integrate the capabilities and command and control (C2) of joint air assets. Normally, the JFACC is the Service component commander having the preponderance of air assets and the capability to plan, task, and control joint air operations. The need for a JFACC is based on the JFC’s overall mission, concept of operations, missions and tasks assigned to subordinate commanders, forces available, duration and nature of joint air operations desired, and the degree of unity of command and control of joint air operations required.”³³⁶

(2) “A JSOTF is normally placed under the control of a Service or functional component commander.”³³⁷

c. **Dual-hatting Considerations**

(1) “The responsibilities of the JFACC, AADC, and airspace control authority (ACA) are interrelated and should normally be assigned to one individual.”³³⁸

(2) “JFMCC has functional responsibility for planning and when directed, executing maritime operations—also may be designated the JFACC.”³³⁹

d. **Multinational Considerations**

(1) Chapter II of JP 3-16 contains four major paragraphs that provide an overview of multinational command structures and specifically addresses alliance and coalition command structures, liaison, and coordination centers. Some excerpts are:

(a) “As in the case of unified action and joint operations, basic organizational options are area or functional orientation and single-Service or joint organization, to which are added national or multinational formations. **Regardless of how the MNF is organized operationally, each nation furnishing forces normally establishes a national component to ensure effective administration of its forces.** Its functions are similar to a Service component command at the unified command level in a US joint organization.”³⁴⁰

(b) “**An alliance organized under an integrated command structure** provides unity of effort in a multinational setting. (See

Figure II-4.) A good example of this command structure is found in NATO where a major NATO commander (MNC) is designated from a member nation, but the MNC staff and the commanders and staffs of subordinate commands are of multinational makeup. The key ingredients in an integrated alliance command are that a single commander be designated, that the staff be composed of representatives from all member nations, and that subordinate commands and staffs be integrated into the lowest echelon necessary to accomplish the mission.”³⁴¹

(c) **“This structure [lead nation] exists in an alliance when all member nations place their forces under the control of one nation.** (See Figure II-5.) A current example in NATO is the Allied Command Europe Rapid Reaction Corps. The makeup of whose headquarters staff and subordinate commands depends largely on the lead nation. The command can be distinguished by a dominant lead nation command and staff arrangement with subordinate elements retaining strict national integrity.”³⁴²

(d) **“Coalitions are most often characterized by one of three basic structures: parallel, lead nation, or a combination of the two.** In coalition operations, member nations may desire to retain even more control of their own national forces than is generally associated with alliance operations.”³⁴³

(e) “There are two key structural enhancements that should improve the control of MNFs: a liaison network and coordination centers.”³⁴⁴

(2) “Agreement on threats and a clearly defined, responsive, and interoperable C2 structure are crucial to effective multinational operations.”³⁴⁵

6. **Organization of the JFC’s Staff**

a. **Guidelines on Selection, Formation, and Organization**

(1) “JFCs organize their joint force staff and assign responsibilities as necessary to ensure unity of effort and mission accomplishment.”³⁴⁶

(2) “Although the J-4 organization should be based on wartime tasks, it could well be staffed at reduced levels in peacetime. Still, the full wartime structure should be defined to aid in rapid expansion. The use of Reserve Component augmentees can provide pre-trained expertise to support the wartime structure. It is critical that augmentees be identified in advance, trained, included in exercises, and scheduled for

movement in OPLAN time- phased force and deployment data (TPFDD).”³⁴⁷

b. **Joint Force Staff Options and Factors**

(1) JP 3-01 (FC) contains a paragraph on the joint force staff. It includes subparagraphs for each staff division outlining their responsibilities regarding counterair operations.

(2) “The CJTF organizes the JTF staff to provide the appropriate expertise required to carry out the specific FHA [foreign humanitarian assistance] mission. Some staff functions that require increased support and manning include legal services, security, engineers, public affairs, health services, psychological operations, civil affairs, resource management and logistics. Additional staff sections may also be established to complement and emphasize critical functions.”³⁴⁸

(3) “Normally, the **EW [electronic warfare] Officer** is the principal staff EW planner on a joint staff. . . The requirement for **staff personnel** to support the EW Officer varies among joint staffs. The number of personnel required to carry out EW staff functions, their areas of expertise, and the division of labor among them should be appropriate to the scope of the commander’s responsibilities.”³⁴⁹

d. **Multinational Considerations**

(1) “There is no standard staff organization common to UN PK [peacekeeping] force headquarters. The staff is ordinarily grouped into three main categories: . . . The **MNF commander’s personal staff** normally consists of a military assistant, a political adviser, a legal adviser, a public affairs officer (PAO), an interpreter, and LNOs from the armed forces of the parties to the dispute. . . The **military staff** normally consists of a chief of staff, a deputy chief of staff, and an operations staff (intelligence, plans, training, communications, air traffic control, security, police operations, observer groups, administration, health service support (HSS), logistics, and CMO staff officer). Linguists may also be included to facilitate communications. . . The **civilian staff**, provided by the UN Secretariat in New York, at a minimum consists of a chief administrative officer (CAO). The CAO is responsible for the direction of all administrative matters having financial implications, as well as for the overall direction of the force’s administration.”³⁵⁰

(2) “The CJTF may establish a CMOC to coordinate and facilitate US and multinational forces humanitarian operations with those of international

and local relief agencies, host-nation agencies, and host-nation authorities.”³⁵¹

7. **Joint Force Commander’s Staff Processes**

- a. **Flattening**. There are no examples of direct references to flattening.
- b. **Span of Control**. “Tasking forces is situationally dependent and normally tailored by the JFC to enable effective spans of control, responsiveness, tactical flexibility, and force protection.”³⁵²
- c. **Reachback**. There are no pertinent examples of a “reachback” concept in draft joint publications.

- d. **Collaborative Planning**

- (1) “The NBC [nuclear, biological, and chemical] Cell participates in the entire joint planning process. Figure D-11 provides a summary of the **collaborative planning** process at the combatant command and JTF levels.”³⁵³

- (2) “The intent of the supported combatant commander’s TPFDD LOI [letter of instruction] is to eliminate confusion, facilitate **parallel planning**, and expedite TPFDD refinement by providing component commands, supporting commands, and agencies a single set of instructions for TPFDD input and management.”³⁵⁴

- (3) “All commands conduct concurrent planning via working papers, informal and formal drafts, liaison efforts, and face-to-face (action officers and commanders) meetings and conferences. These plans synchronize joint functions at the operational level of war.”³⁵⁵

- e. **Writing Orders**

- (1) JP 3-35 (PC) provides a sample format for a CJCS deployment preparation order.

- (2) Appendix D, “Deployment Preparation Orders, Deployment Orders, Redeployment Orders, and Request For Forces,” in JP 3-35, “Joint Deployment and Redeployment Operations” (PC), provides sample formats for each type.

- f. **Information Management**

- (1) “**Force Tracking**. Force tracking is fundamental to effective force employment and C2. JFCs must be able to continuously monitor

execution of the joint force deployment operation and quickly respond to changing situations and unforeseen circumstances. Timely JFC response is a function of informed decision making and effective control. Force tracking is the process of gathering and maintaining information on the location, status, and predicted movement of each element of a unit, including the unit's command element, personnel, and unit-related supplies and equipment, while in transit to the specified operational area. Once basic mission requirements have been decided, joint force planners must review force tracking options to provide the supported combatant commander with the requisite C2 means to monitor and control execution of the joint force deployment."³⁵⁶

(2) "The C2 module of GTN [Global Transportation Network] organizes and displays vital transportation asset and resource information that assists USTRANSCOM to understand, identify, and implement various transportation options and COAs."³⁵⁷

(3) "An important consideration is the management of information transmitted over communications paths. JFCs must consider intelligence mission requirements when prioritizing information dissemination in terms of the product, the available communications paths, and the time sensitivity of the product. Dissemination priorities must be updated throughout the course of the operation."³⁵⁸

g. **COA Development and Analysis**

(1) Appendix A, "Deliberate and Crisis-Action Planning Processes," in JP 3-35 (PC) provides discussions on JOPES and joint operational planning, along with figures illustrating a joint planning summary and the comparison of crisis action and deliberate planning procedures.

(2) "**COA Development.** The engineer identifies specific engineer tasks necessary to support each COA and provides options for joint force operational movement, maneuver, and protection from an engineer perspective. The development may include recommendations on intermediate staging bases (ISBs), forward operating bases (FOBs), forward logistics support sites (FLSS), avenues of approach, MSRs, barriers and breaching, assembly areas, POL [petroleum, oils, and lubricants] distribution and storage, ports, and airfields. During this phase the engineer also evaluates the suitability, feasibility, acceptability, variety, and completeness of each COA and develops the initial engineer force structure for each time phased force deployment data (TPFDD) document. . . **COA Evaluation and Selection.** During COA selection the engineer analyzes and compares the different COAs. The engineer would as a minimum, evaluate criteria of risk assessment, resource

requirements, time available, and mobility and survivability factors during COA comparison.”³⁵⁹

(3) “During CAP, evaluate each COA considered with respect to EW resources required and the EW opportunities and vulnerabilities inherent in the COA.”³⁶⁰

(4) “**COA Development.** . . Development of a realistic, efficient, and effective COA can be critically linked to METOC [meteorological and oceanographic] information. The tasking of subordinates to provide input to this process involves another layer of METOC officers that can significantly improve the METOC data base for the operating area. Appendix B, “METOC Information in Operation Plans,” provides guidance on the METOC information requirements of the CINC’s “Commander’s Estimate” message. . . **COA Selection.** This is the time for communication between the SMO, JMO (if identified), and Service component METOC planners who will provide the METOC personnel, equipment, and services judged necessary to fully support the planned operation.”³⁶¹

h. **Commander’s Estimate Process**

(1) JP 5-00.1 (PC) discusses the theater commander’s estimate of the situation process in an appendix. It includes guidance on staff estimates, estimate process, analysis of the situation, COA analysis, COA analysis and comparison, COA selection, and format for commander’s estimate of the situation.

(2) “The commander’s estimate will include the characteristics of currents, tides, and similar maritime considerations,. And determine and state extremes of temperature, wind velocities, cloud cover, visibility, precipitation, and other such factors that can affect all military operations. Sunrise and set, moonrise and set, civil, nautical, and/or astronomical twilight data, and moon percent illumination are also normally provided.”³⁶²

i. **Boards and Agencies**

(1) “The JFC may establish and define the role of a JTCCB to accomplish broad targeting oversight functions. Functions of the JTCCB may include, but are not limited to, coordinating targeting information and providing general targeting guidance and priorities.”³⁶³

j. **Information Fidelity**

(1) “Comprehensive intelligence support to the JFC requires analysis and integration of multiple intelligence collection products in order to resolve ambiguities and provide the most accurate information.”³⁶⁴

(2) “Intelligence’s purpose is to support operations by providing the JFC and component commanders with timely and accurate information.”³⁶⁵

(3) “JTAV [joint total asset visibility], when fully functional, will provide users with “one stop shopping” for timely and accurate information on the location, movement, status, and identity of units, personnel, equipment, and supplies during force projection operations.”³⁶⁶

8. **Organization of the Theater, Area, or Battlespace (Operational Areas)**

c. JP 3-18 (PC) devotes a major paragraph in Chapter II, “Command and Control,” to organization of the forcible entry operations area. Guidance regarding the area of operations, amphibious objective area, joint special operations area, and airspace control area is provided. Figure II-3 illustrates a notional joint forcible entry operations area.

b. “When warranted, geographic combatant commanders may designate theaters of war and, perhaps, subordinate theaters of operations for each major threat. In time of war, the NCA or geographic combatant commander may elect to define a theater of war within the combatant commander’s AOR. The theater of war is that area of air, land, and water that is, or may become, directly involved in the conduct of war. To assist in the coordination and deconfliction of joint action, the combatant commander may define operational areas or joint areas. The size of these areas and types of forces employed within them depend on the scope and nature of the crisis and the projected duration of operations. For operations somewhat limited in scope and duration, combatant commanders can designate the following operational areas: JOA, Joint Special Operations Area, Joint Rear Area, Amphibious Objective Area, Area(s) of Operation, Tactical Assembly Areas, and Area(s) of Interest.”³⁶⁷

9. **Command and Control Systems (Information Systems)**

a. “Effective joint counterair operations require a reliable C4I capability that integrates air-, surface-, subsurface-, and space-based assets. C4I resources detect, identify, and track threats to warn and cue defensive assets as well as provide accurate launch and impact points. These resources should be capable of rapidly exchanging information, interfacing with components, and displaying a common operational picture to all components of concern. The information flow should support the chain of command and be as complete, secure, and as near-real-time as possible.”³⁶⁸

b. “The C4I architecture provides the timely intelligence and operational information needed to plan, employ, coordinate, deconflict, execute, and sustain joint counterair operations.”³⁶⁹

c. **“Integrated Command, Control, and Communications (IC3) System.** . . IC3 is the MSC [Military Sealift Command] C2 system to efficiently manage this mission and to provide USCINCTRANS, the Chief of Naval Operations, and other customers with reliable, comprehensive, and timely information. IC3 supports MSC’s requirements for C2 and tracking of sealift assets, cargo, and POL. Additionally, it interfaces with other key information systems . . .”³⁷⁰

d. “The NBC Battle Management system works within joint force and Service command and control support (C2S) systems. The joint force C2S system give the Joint Force Commander (JFC) the means to exercise authority and direct assigned and attached forces in the accomplishing the mission. The JFC uses information to support decision making and coordinate actions that will influence friendly and enemy forces to the JFC’s advantage (See JP 6-0). NBC defense assets are part of the forces that compose the joint C2S systems.”³⁷¹

10. **Other**

a. **Coalition C2 Guidance**

(1) JP 3-16 (FC) contains guidance on coalitions and provides a major paragraph on coalition command structures. Some excerpts are:

(a) “A coalition is an ad hoc arrangement between two or more nations for common action.”³⁷²

(b) “Within a coalition formed to meet a specific crisis, the political views of the participants may have much greater influence over the ultimate command relationships. National pride and prestige of member nations can limit options for organization of the coalition command, as many nations prefer to not subordinate their forces to those of other nations. Coalition missions and objectives tend to evolve over time. Likewise, personnel quality and unit capabilities may vary over time. This variation will, in turn, affect the overall command capability to react to a changing mission. Political objectives and limitations will also change over time, further complicating the task of the MNFC [multinational force commander]. The commander should be attuned to these changes and make adjustments to the command structure and training program to mitigate negative impacts where possible.”³⁷³

(c) “Many coalitions are formed in rapid response to unforeseen crises which usually occur outside the area or scope of an alliance or when the response requires more than an alliance to handle it. The command relationships usually evolve as a coalition develops. . . In coalition operations, member nations may desire to retain even more control of their own national forces than is generally associated with alliance operations.”³⁷⁴

(d) “National pride and prestige of member nations can limit options for organization of the coalition command, as many nations prefer to not subordinate their forces to those of other nations.”³⁷⁵

(e) “Coalitions are most often characterized by one of three basic structures: parallel, lead nation, or a combination of the two.”³⁷⁶

(f) “Another means of controlling a MNF is the use of a friendly forces coordination center. US commanders should routinely advocate creation of such a center in the early stages of any coalition effort, especially one that is operating under a parallel command structure.”³⁷⁷

(2) “Coalition members should share all relevant and pertinent intelligence about the situation and adversary. However, information about intelligence sources and methods should not be shared with coalition members until approved by the appropriate national-level agency.”³⁷⁸

(3) “The JFC must be prepared to negotiate with allies and coalition partners when planning and developing ROE, airspace control measures, weapon control measures, and other appropriate areas.”³⁷⁹

(4) “The CFST [coalition forces support team] was organized to coordinate activities between participating multinational forces. The CFST focused on controlling all support and coordination tasks.”³⁸⁰

(5) “In the absence of appropriate agreements, no authority exists for combatant commanders to provide for or accept logistic support from allies or coalition forces.”³⁸¹

b. **Interagency C2 Guidance**

(1) JP 3-07.6, “JTTP for Foreign Humanitarian Assistance” (PC), contains a major paragraph on coordination and relationships with NGOs, PVOs, and IOs (international organizations). Some excerpts are:

(a) “Clearly articulate the role of the military and how it intends to interact with NGOs, PVOs, and IO. It is imperative that these organizations understand that the military mission may only allow limited types of support for their operations. Assets such as the crisis action team, HOC, civil-military operations center (CMOC), and LNOs are effective methods of ensuring mission clarity.”³⁸²

(b) “Ensure agreements and memorandums of understanding fully address funding considerations, delineate authority, and define negotiation channels. Agreements may include air and surface transportation, petroleum products, telecommunications, labor, security, facilities, contracting, engineer support, supplies, services, and medical support.”³⁸³

(2) JP 3-16 (FC) contains a major paragraph on civil-military coordination. Some excerpts are:

(a) “It is imperative that any interagency structure relationships be clearly defined with respect to military support before commencement of operations other than war.”³⁸⁴

(b) “In addition, the OPLAN should provide guidance to the MNFC regarding relationships with and support to NGOs, PVOs, and international organizations operating within the operational area.”³⁸⁵

(3) “The establishment of **interagency coordinating centers**, such as civil-military operations centers (CMOCs), is one means of fostering unity of effort in achieving objectives of the operation.”³⁸⁶

c. **Interface of Civil Command Structure with JFCs. JP 3-07.7, “JTTP for Domestic Support Operations” (PC)**, describes the C2 process; C2 for military support to civilian authorities; and provides figures illustrating C2 relationships during animal and plant disease emergencies, wildfire emergencies, radiological emergencies, mass immigration emergencies, and military assistance for civil disturbance. Some examples are:

(1) “USCINCOM, as supported commander, may establish a JTF using an existing command headquarters such as an Army corps, Navy fleet, numbered Air Force, or Marine Corps expeditionary force. Due to the short notice associated with a disaster, a ready-made robust headquarters is preferred for the basis of the JTF.”³⁸⁷

(2) “The relationship of the commander, joint task force (CJTF) and the DCO [Defense coordinating officer] is based upon several factors such as duration of the response effort and the JTF mission. However, the responsibility for determining the C2 relationship between the DCO and

the CJTF rests with the supported commander. When a JTF or task force is commanded by a general/flag officer, the DCO (with the DCE [Defense Coordinating Element] staff) normally works for the commander as a special staff officer. The DCO is the DOD interface with FEMA [Federal Emergency Management Agency], other federal providers, and the SCO [State Coordinating Officer] representative located in the DFO [Disaster Field Office].³⁸⁸

d. **C2 and nontraditional/asymmetric operations (MOOTW)**

(1) **JP 3-07.3, “JTTP for Peace Operations” (FC)**, provides C2 guidance in general and specifically for peacekeeping and peace enforcement. Some excerpts are provided below. Additionally, Appendix D, “Chains of Command,” provides figures which illustrate a notional chain of command for peacekeeping operation and a chain of command for a multinational force and observers.

(a) “Although US forces may be placed under the operational control (OPCON) of non-US commanders in certain circumstances, the command line from the NCA will remain inviolate, running from the NCA to the combatant commander (and other supported combatant commanders, as appropriate) to subordinate US commanders.”³⁸⁹

(b) “The organization of a PK force headquarters in non-UN sponsored operations is normally ad hoc, but will generally be structured around common military staff functions such as administration, intelligence, operations, logistics, communications, and CA functions. The commander will also have a personal staff and civilian staff. In UN-sponsored operations national contingents perform under OPCON of the UN force commander.”³⁹⁰

(c) “For multinational operations, PE [peace enforcement] forces may operate under either a lead nation or a parallel C2 arrangement. (See Figure III-2).”³⁹¹

(2) JP 3-07.6 (FC) contains guidance on coordination and relationships with NGOs, PVOs, and IOs; JTF and JTF staff organization, CMOC, HOC, JTF level coordination, C2 planning, and liaison. Some examples are:

(a) “Be aware that not all NGOs, PVOs, and IO appreciate military assistance or intervention into humanitarian assistance (HA) operations. Some NGO, PVO, and IO charters do not allow them to collaborate with armed forces based on political mandates, neutrality, religious, or impartiality concerns. FHA commanders need to honor this fact, while still striving for unity of effort. Commanders may find it beneficial to use a third party to establish

liaison with NGOs, PVOs, and IO reluctant to establish direct contact with military organizations.”³⁹²

(b) “JTF organization for FHA is similar to traditional military organizations with a commander, command element, and mission tailored forces. However, the nature of FHA results in combat support and combat service support forces (i.e., engineers, military police, logistics, transportation, legal, chaplain, and medical) often serving more significant roles than combat elements.”³⁹³

(c) “The CJTF organizes the JTF staff to provide the appropriate expertise required to carry out the specific FHA mission. Some staff functions that require increased support and manning include legal services, security, engineers, public affairs, health services, psychological operations, civil affairs, resource management and logistics. Additional staff sections may also be established to complement and emphasize critical functions.”³⁹⁴

(d) “The CJTF may establish a CMOC to coordinate and facilitate US and multinational forces humanitarian operations with those of international and local relief agencies, host-nation agencies, and host-nation authorities. The CMOC, working closely with the OFDA [Office of Foreign Disaster Assistance]/DART [Disaster Assistance Response Team], provides the primary interface between US military forces and relief agencies and other organizations involved in the operations, whether or not a HOC (described later in this chapter) or similar organization is established.”³⁹⁵

(e) “The HOC is primarily an interagency policymaking and coordinating body that does not exercise C2 but seeks to achieve unity of effort among all participants in a large FHA operation. Close JTF coordination with the affected country, UN, and other key members of the humanitarian relief community forms the core of FHA operations. Effective coordination is the key to successful turnover of FHA responsibilities to the affected country or UN, NGOs, PVOs, and IO. During large scale FHA operations, a HOC may be established to accomplish this coordination.”³⁹⁶

(f) “Although there is no command relationship between military forces and OGA, UN agencies, NGOs, PVOs, IO, affected country elements and allied or coalition governments, clearly defined relationships may foster harmony and reduce friction between participating organizations.”³⁹⁷

(g) “Direct, early liaison with UN and other humanitarian relief agencies is a valuable source of accurate, timely information on many

aspects of the crisis area. . . ongoing liaison with other multinational forces participating in the operation is equally important.”³⁹⁸

e. **Database management/Control/Authority to Change** No references were discovered.

f. **Definitions**. “**Common Operational Picture (COP)** The COP is a graphical display of friendly, hostile, and neutral units, assets, overlays, and/or tracks pertinent to operations and is a key tool for commanders in planning and conducting joint operations. The GCCS COP may include relevant information from the tactical to the strategic level of command. The system currently includes geographically oriented data, with planning data from JOPES and readiness data from the Status of Resources and Training System envisioned for future inclusion.”³⁹⁹

SECTION C: OTHER DOCUMENTATION

1. C2 Description and Theory

a. US Air Force

(1) Chapter 3 of AFDD 1, “Air Force Basic Doctrine,” dated September 1997, provides a short overview consisting of two large paragraphs on C2 from the airman’s perspective. The discussion provides a definition of C2 as well as the concept that “command and control includes both the process by which the commander decides what action is to be taken and the system which monitors the implementation of the decision.”⁴⁰⁰ Additionally, it postulates that “command and control involves the integration of the systems of procedures, organizational structures, personnel, equipment, facilities, information, and communications designed to enable a commander to exercise command and control across the range of military operations.”⁴⁰¹

(2) Chapter 3 of AFDD 2, “Organization and Employment of Aerospace Power,” dated 28 September 1998, provides an introductory paragraph on the basic precepts of C2. The paragraphs provide an outline of two central ideas—that “the principle of unity of command and the tenet of centralized control and decentralized execution—underpin the way the Air Force organizes. In order to effect this, the Air Force requires a universally understood organizational structure that can support joint and combined operations throughout the entire spectrum of conflict. In any operation.”⁴⁰²

(3) AFDD 28, “Command and Control,” is in draft.

b. **US Navy.** NDP 6, “Naval Command and Control,” dated 19 May 1995, is devoted to a thorough discussion of the principles of C2. The introduction provides a framework for the rest of the document by describing C2 as “an essential element of the art and science of naval warfare.”⁴⁰³ It goes on to say that “command is the authoritative act of making decisions and ordering action; control is the act of monitoring and influencing this action.”⁴⁰⁴ The publication is broken down into the following topics by chapter. Chapter 1 provides the overarching concepts of C2, with a section entitled “What is Command and Control?.” Chapter 2 delves deeper into the mechanics by covering the processes of C2. Specifically, this chapter contains discussion on the decision and execution cycle, decision making theory, and methods of control. Chapter 3 provides a discussion of the mechanism of C2 by looking at the naval C2 system.” Specifically, this chapter covers organizing for C2 and the role of information in C2. Finally, Chapter 4 covers recommendations for building effective C2. Chapter 4 contains some discussion on fundamentals of effective C2 and C2 in the age of the information revolution.

c. **US Army.** Chapter 1 of FM 101-5, “Staff Organization and Operation,” dated 31 May 1997, also provides discussion on the art and science nature of C2. It defines C2 as “an essential element of the art and science of warfare.”⁴⁰⁵ It goes on to say that C2 is “the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission.”⁴⁰⁶ It identifies the fact that the focus of C2 is the commander. It states that “command is the authoritative act of making decisions and ordering action; while control is the act of monitoring and influencing this action.”⁴⁰⁷ Chapter 1 also covers such topics as C2 systems and the staff’s role and place in C2 of forces in the accomplishment of military missions. It also explains the relationship between situational information, such as information on mission, enemy, terrain, troops, and time available to the concept and processes of control. Chapter 5 provides extensive discussion on the military decision making process. Specifically, it discusses decision making in the context of mission analysis, planning and COA selection. Additionally, Chapter 5 provides a discussion on the commander’s staff and their role in the military decision making process.

d. **US Marine Corps**

(1) Chapter 4 of FMFM1, “Warfighting”, dated 6 March 1989, primarily discusses the USMC’s philosophy of command. The publication describes the USMC approach as one that charges subordinate commanders to make “decisions on their own initiative, based on their understanding of their senior’s intent, rather than passing information up the chain of command and waiting for the decision to be passed down.”⁴⁰⁸ Additionally, Chapter 4 describes the Marine Corps’ approach

to decision making. The publication goes on to describe the principle means by which Marines implement decentralized control as being through the use of mission type orders.

(2) MCDP 6, "Command and Control", dated 4 October 1996, like NDP 6, provides a detailed and expansive discussion on the topic of C2. MCDP 6 begins in Chapter 1 with a discussion on the nature and importance of C2, saying that "No single activity in war is more important than command and control. Command and control by itself will not drive home a single attack against an enemy force. It will not destroy a single enemy target. It will not effect a single emergency resupply. Yet none of these essential warfighting activities, or any others, would be possible without effective command and control."⁴⁰⁹ Much like the other Service publications dealing with C2, MCDP 6 defines C2 and describes the relationship between the two such that "command as the exercise of authority and control as feedback about the effects of the action taken."⁴¹⁰ Chapter 1 goes on further to describe the impact the information age is having on C2 in military operations. Chapter 2 of this document opens the discussion looking at the decision making process. The model it uses to do this is Col Boyd's model of Observe, Orient, Decide, and Act (OODA). Also covered in Chapter 2 is a discussion of what the Marine Corps terms the information hierarchy. This discussion draws a distinction between what they identify as four classes of information, running from raw data to understanding.

2. **Relationship of C2 Decisionmaking Model [Process] to JFC's C2 Tasks**

- a. "The Force Augmentation and Planning Execution System (FAPES) is an automated application to access the networked TPFDD data within GCCS and provide analysis information to support decisionmaking. FAPES is the preferred method of generating the RC Requirements Summary. If FAPES is not available, the information must be compiled manually."⁴¹¹
- b. **"Determine Commander's Critical Information Requirements.** To determine the critical information that a commander requires to understand the flow of operations and to make timely and informed decisions. The commander specifies the critical information needed to support a decision-making process to retain the initiative."⁴¹²
- c. "Establish the planning cycle to best support CJTF decision making. Normally includes preparation of briefings for mission analysis, COA development and selection, proposed concept of operations, and other decision briefings as required."⁴¹³
- d. "The CJTF and his staff control current reconnaissance operations and plan and direct future operations. Reconnaissance operations result in

providing the CJTF timely and accurate information to support the decision making process.”⁴¹⁴

e. “The CJTF and his staff control current C4 operations, and plan and direct future operations. C4 operations facilitate the development, use and exchange of information relevant to the planning and conduct of joint military operations. . . Implementation of the concept facilitates operational decision-making by the CJTF and component commanders, and planning and implementation of operations by the JTF staff and the JTF components.”⁴¹⁵

3. **Theater C2 Architecture.** “The concept for C4 support will describe a system or body of systems that facilitate the development, use, and exchange of information relevant to the planning and conduct of joint military operations. . . Implementation of the concept facilitates operational decision making by the CJTF and component commanders, and planning and implementation of operations by the JTF staff and the JTF components.”⁴¹⁶

4. **Multinational Considerations.** “Determine capabilities and limitations of multinational forces, and interagency units, organizations, or agencies. Consider: (1) Command and control and decision making (2) Force projection and capabilities for operational movement and maneuver.”⁴¹⁷

5. **Common Operational Picture.** CJCSI 3151.01, “Global Command and Control System Common Operational Picture Reporting Requirements,” is a 59 page document that includes guidance on reporting requirements, information flow and data management, and the COP operational architecture.

6. **Span of Control.** “**Procedures for the Review of Operation Plans.** Are the commander’s responsibilities within his span of control?”⁴¹⁸

7. **Writing Orders.** CJCSM 3122.03, “Joint Operation Planning and Execution System Volume II Planning Formats And Guidance,” provides detailed formats and guidance for developing OPLANs, CONPLANs and functional plans, and associated annexes.

8. **Information Management**

a. “The functional proponents creation, use, sharing, and disposition of data or information as corporate resources critical to the effective and efficient operation of functional activities consistent with IM [information management] guidance issued by the Assistant Secretary of Defense for Command, Control, Communications and Intelligence. It includes information resource management, and supporting information technology and information services.”⁴¹⁹

b. **“Information Resources Management (IRM).** The planning, budgeting, organizing, directing, training, promoting, controlling, and management activities associated with the burden, collection, creation, use, and dissemination of information by agencies and includes the management of information and related resources, such as federal information processing (FIP) resources.”⁴²⁰

c. **“Information Resources Management (IRM) Program.** . . . SJS [Secretary, Joint Staff] is responsible for Joint Staff non-technological information management activities to include providing guidance in the application of established laws and policies for the creation, maintenance, use, disposition, and access to Chairman of the Joint Chiefs of Staff, Joint Chiefs of Staff, and Joint Staff papers and information (reference ii) and assisting in the design and development of new AISs.”⁴²¹

e. **“Technical Architecture Framework for Information Management (TAFIM)**–The TAFIM is a set of documents produced by DISA for the OSD [Office of the Secretary of Defense] to guide DOD information systems toward an open systems architecture. It provides the services, standards, design concepts, components, and configurations that can be used to guide the development of technical architectures that meet specific mission requirements.”⁴²²

9. **COA Development and Analysis.** CJCSM 3122.02, “Crisis Action Time-Phased Force and Deployment Data Development and Deployment Execution,” has an enclosure devoted to COA development and another has very general guidance on COA selection.

10. **Database Management/Control/Authority to Change**

a. “Personnel assigned duties for track management must keep up with changes as they occur. . . . The **track database managers** must be knowledgeable of the entire COP system operation . . . a close partnership between the track manager and systems administrator must exist to maintain an effective and accurate COP.”⁴²³

b. “The GDBA (GCCS Database Administrator) is responsible for the day-to-day operations of the databases located at the GCCS site.”⁴²⁴

11. **Definitions**

a. **“Common Operational Picture (COP).** The COP is the integrated capability to receive, correlate, and display a Common Tactical Picture (CTP), including planning applications and theater-generated overlays/projections (i.e., Meteorological and Oceanographic (METOC), battle plans, force position projections). Overlays and projections may include location of friendly, hostile, and neutral units, assets, and reference

points. The COP may include information relevant to the tactical and strategic level of command. This includes, but is not limited to, any geographically oriented data, planning data from JOPES, readiness data from SORTS, intelligence (including imagery overlays), reconnaissance data from the Global Reconnaissance Information System (GRIS), weather from METOC, predictions of nuclear, biological, and chemical (NBC) fallout, and Air Tasking Order (ATO) data.”⁴²⁵

b. **Common Tactical Picture (CTP)** The CTP is derived from the CTD and other sources and refers to the current depiction of the battlespace for a single operation within a CINC’s AOR including current, anticipated or projected, and planned disposition of hostile, neutral, and friendly forces as they pertain to US and multinational operations ranging from peacetime through crisis and war. The CTP includes force location, real time and non-real-time sensor information, and amplifying information such as METOC, SORTS, and JOPES.”⁴²⁶

CHAPTER III

ANALYSIS RESULTS

“Command and control (C2) is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission.”

JP 3-0, “Doctrine for Joint Operations”

1. **Quantity.** Currently, there are at least 18 approved and four draft joint publications that contain an entire chapter devoted to C2, command relationships, or joint force/staff organization. Prominent among those are JP 0-2, which could be considered the joint community’s C2 centerpiece, and JP 5-00.2, the JTF centerpiece. Additionally, many of the keystone publications (1-0, 2-0, 4-0) contain chapters devoted to C2 subjects. Numerous other publications such as JP 1 and JP 3-0 contain a major (numbered) paragraph addressing C2 subjects. Further, JP 5-0 primarily addresses joint operation planning and execution, which is a decision making tool and a C2 related subject. Furthermore, four approved and one draft joint publication were designed to address unique C2 issues. Prominent among those are JP 6-0, which addresses C4 systems support, and JP 3-16, which discusses the unique aspects of C2 in a multinational environment. One hundred and ten (110) of the 121 joint publications on the USACOM JWFC JEL discuss C2 to some degree. Note: the total number (121) of joint publications on the USACOM JWFC JEL is higher than the 107 on the joint doctrine hierarchy because some are in revision and thus have a draft version, and the DOD dictionary has three configurations.

2. **Quality and Distribution**

a. **Command and Control Description and Theory**

(1) The **basic definitions and Tenets of C2** are covered primarily in JPs 0-2, 1, 1-02, and 3-0 and packaged in chapters, sections, or major paragraphs for easy reference. They clearly articulate the definitions and elements of command, control, and C2. They address the concept of command as an art and stress the JFC’s role to ensure unity of command and thus unity of effort. To facilitate command it is clear the JFC must establish command relationships and issue prioritized mission-type orders. The concept and purpose of control is outlined. Communications, intelligence, and computers, along with space-based systems for surveillance, navigation, and location are established as the tools for implementing command decisions. Additionally, the importance

of liaison, commander's intent, and the role of component commanders is discussed adequately. Other approved or draft joint publications repeat or clarify basic principles by discussing centralized planning/control and decentralized execution, and mission-type orders.

(2) Three of the four Services (Navy, Marine Corps, Air Force) have or are developing **Service C2 publications**. The Army discusses C2 in its key publication, FM 100-5. Generally, the Services address the same tenets as those found in joint publications. The concepts of command, control, unity of command, centralized control/decentralized execution, the C2 process, C2 mechanisms, the central role of the commander, the joint force staff's role, the relationship of information to control, decision making, commander's intent, and mission-type orders are discussed.

(3) Joint publications do not label any doctrine as a "**C2 decisionmaking model**." However, the joint operation planning process for both deliberate and crisis-action planning could be considered a decisionmaking model since a COA is ultimately selected, documented, directed, monitored, and modified. The joint operation planning process and JOPES, the system used to conduct joint planning, is thoroughly discussed in JP 5-0 and JP 5-00.2 and referenced in several other publications (JPs 3-0, 1-0, 2-0, 4-0) when discussing mission analysis; the various staff estimates; COA development, analysis, comparison, and selection; and the commander's estimate. JP 3-13.1 describes the "decision cycle" as an observe, orient, decide, and act loop; however, no other joint publication builds on the idea.

(4) Likewise, joint publications do not label any doctrine as a "**warfighting model**." However, taken as a whole, joint doctrine essentially describes our warfighting model as the establishment of a joint force with an authority figure, the JFC, to ensure unity of effort and components to execute the commander's intent or mission-type orders. This organizational structure is punctuated by established command relationships and functional C2 nodes. The structure and functions of the joint force, along with the related joint doctrine principles make up our warfighting model.

b. **Theater/JFC-level C2**

(1) The **theater-level structure (architecture)** for intelligence, logistics, special operations, air C2, airspace control, air defense, air-ground system, and potential multinational structures, along with the requirement for a COP are thoroughly discussed in approved joint publications. Missing is the structure for space system support. JP 5-00.2 contains the architecture for JTF-level operations, which may not be theater-wide, along with potential multinational structures.

(2) A host of activities described in both approved and draft publications, along with CJCS directives could qualify as **C2 tasks that relate to decisionmaking**. Examples are the gathering of intelligence, JIPB, development of staff estimates, COA development, execution of the targeting/ATO cycle, integration of agencies and multinational forces, formulation of PIRs and CCIRs, TPFDD development and modification, gathering BDA, and designing a C4 system.

(3) **Alternate C2 nodes** are abundant and thoroughly described in approved and draft joint doctrine. The descriptions and functions of various liaison teams/elements, operations centers (JOC, JAOC, RAOC, base defense operations center), and other specialized organizations such as the JSRC and JFE are provided in numerous publications.

(4) Approved and draft doctrine recognizes that the **JFC/MNFC must synchronize the efforts of air, land, sea, space, and special operations forces**. To do that, it recommends developing integrated campaign/operation plans, synchronizing maneuver and interdiction, establishing priorities, coordinating with nonmilitary organizations, crosswalking subordinate orders with the OPORD, and establishing command relationships. Additionally, the establishment of various operation centers, boards, and cells facilitate synchronization.

(5) The basic doctrine for C2 of **transient forces en route** to their theater of operations is addressed in JP 0-2. A few other publications add some subject-unique guidance, as required. For example, JP 5-00.2 recommends C2 arrangements when JTF forces are deploying and redeploying.

(6) The concept of “**effects-based operations**” is not addressed separately in either approved or draft joint publications. However, it is very common to find guidance in the JP 3-0 series and some 2-0 series publications regarding determining and assessing the desired effects of fires or maneuver. Further, JP 5-00.2 groups “effects on the enemy” with battle results and the desired end state.

c. **Command Relationships**

(1) Joint doctrine on **basic command relationships** and their application is very complete and included, to some degree, in nearly every publication. The primary reference documents are JPs 0-2 and 3-0, which describes the four fundamental command relationships (COCOM, OPCON, TACON, and support), along with other authorities. Joint doctrine also addresses considerations for applying each type, categories of support, and the supported and supporting commanders.

(2) Some publications focus on **command relationships at the strategic level** by addressing the unique aspects associated with special operations, common-user airlift, PSYOP, or multinational operations. Others identify the **operational-level application** of OPCON, TACON, and support relationships to situations where a JFACC, AADC, SOF, PSYOP, rear area units, airlift forces, CSAR elements, etc. are employed.

(3) Some publications address **multinational command relationships** and JP 3-16 (FC) is chief among them. The concepts of foreign OPCON, retention of the National chain-of-command, limitations of a foreign commander, a coordinating authority, and the MNFC are discussed.

d. **Organization of Joint Forces**

(1) JP 0-2 addresses **basic organizational structures and principles** in depth. The authority to establish and organizational options for unified, specified, sub-unified, JTFs, and component structures are addressed. Other joint publications build on that foundation by addressing items ranging from the building blocks of a JTF headquarters to the justifying elements for functional components. JP 5-00.2 identifies specific conditions for establishing a JFACC, JFLCC, JFMCC, JFSOCC, JSOTF, JCMOTF, and JPOTF, along with the responsibilities of the commander and staff options. JP 3-56.1 continues to “peel the onion” by outlining the conditions for establishing a JFACC, JFACC staff options, and the option to assign joint air operations functions to the JFC’s staff.

(2) Both JPs 0-2 and 5-00.2 briefly discuss the authority and considerations surrounding **dual-hatting** the CJTF as a component commander. The dual-hatting of the JFACC as the AADC and ACA is discussed in several joint publications.

(3) JP 3-16 is the key publication regarding the **establishment and organizational options of a multinational force**. It addresses alliances, coalitions, and liaison and coordination structures in depth. JP 0-2 and 3-0 also provide the appropriate level of guidance on fundamental considerations and options.

e. **Organization of the JFC’s Staff**. The key publications containing extensive guidance on the composition of the JFC’s staff are JPs 0-2 and 5-00.2. Organizational principles, criteria, and the functions and responsibilities of each principal staff officer; the commander’s personal staff and special staff; and associated boards, centers, and cells are described in detail. The guidance in JP 5-00.2 is so exhaustive that it includes organizational charts and checklists to assist the respective principal staff officer in fulfilling assigned responsibilities. More specialized

guidance can be obtained in other joint publications. Examples include JP 1-0 on the J-1 section organization and functions, JP 4-0 on the functions and organization of the J-4 and logistics centers and boards; and JP 3-13 on the IO cell organization and functions. There is general guidance on integrating multinational force members into the JFC's staff. The guidance in joint publications on organization of the JFC's appears to be easily accessed, since it appears in those publications one would expect such guidance to be located.

f. **JFC's Staff Processes**

(1) JOPES is not labeled as a **collaborative planning** process or system, but the steps and processes involved require the joint force headquarters collaborate with subordinate and superior commanders and staffs. JP 5-0 devotes an entire chapter to joint operation planning and execution. JP 5-00.2 mentions and provides a detailed illustration of the collaborative planning process at the combatant command and JTF levels. The most comprehensive guidance on both deliberate and crisis action planning, along with the development of estimates, plans, and orders is cancelled JP 5-03.3, "Joint Operation Planning and Execution System Volume I (Planning Policies And Procedures)," which is being converted to a CJCSM by decision of the voting members of the JDWP.

(2) The **commander's estimate process to include staff estimates and COA development, analysis, and selection** is well documented in JPs 3-0, 5-0, 5-00.1 (PC), and 5-00.2. Guidance is provided for both the theater commander and subordinate JFC. Other publications round out the guidance by focusing on the individual staff section's estimate and role in COA development and analysis.

(3) Instructions and guidance for **writing orders** is addressed in several joint publications by providing OPORD, OPORD annex, or related orders (deployment/redeployment) formats. Usually the formats provided include guidance regarding the content of each major paragraph. JP 5-00.2 provides the bulk of guidance on the OPORD itself and other publications like JPs 1-0, 4-0, and 3-56.1 include guidance on the respective annexes to the OPORD. Cancelled JP 5-0 series publications that specifically addressed writing orders have been or are being converted (e.g., JP 5-03.3) to CJCSMs. Consequently, the most comprehensive formats and guidance on OPLANs, CONPLANs, functional plans, and associated annexes is located in CJCSM 3122.03.

(4) **Information Management** is primarily associated with specific information systems (e.g., GCCS, SORTS, MEPES, DODIIS) or JOPES information management tools in approved and draft joint publications.

There is very little guidance related to establishing an umbrella process within the joint force to identify, request, receive, track, and disseminate information. However, JP 5-00.2 established the requirement for identifying CCIRs, which may evolve into an umbrella information management process.

(5) The various **boards, centers, cells, and elements** that can be formed by the JFC to facilitate C2 are well documented in approved and draft publications. The most comprehensive outline is in the keystone publications and JP 5-00.2, which provides a separate paragraph for each type describing the makeup and functions. Other publications address specialized organizations (e.g., IO cell, JSRC) as an extension of general guidance in key publications like JP 5-00.2.

(6) The concepts of “**span of control**,” and “**reachback**” are mentioned as factors to consider, but not developed as significant joint doctrine principles. It is recognized that the J-2 needs a reachback capability to draw on the intelligence resources outside the joint force. **Flattening** or reducing the proliferation of staffs and staff sizes is not discussed in approved or draft joint publications.

(7) **Information fidelity** is not a label for a joint doctrine concept, but the importance of obtaining accurate and timely information is a theme of joint doctrine in general.

g. **Organization of the “Theater” “Area” or “Battlespace” (How?)**. JP 3-0 provides the definitive guidance on organizing the operational area. Included in the JP 3-0 guidance is key doctrine on boundaries, and coordinating and control measures. Other publications expand on JP 3-0’s guidance or focus on specialized areas such as the JSOA, JRA, or AOA.

h. **C2 Systems (Information Systems)**

(1) Joint doctrine establishes that **C4 systems** give the JFC the means to exercise authority and direct assigned and attached forces in the accomplishment of the mission. It also describes how C4 systems are to be configured, deployed, and employed. Numerous systems that process information as part of the JFC’s C2 process are described. The primary source is JP 6-0 series publications, however, several others address system requirements related to the publication’s subject area.

(2) Joint publications focus on C4 systems and do not address **weapons systems C2 systems** or attempt to make a point that C2 systems are separate and distinct from weapons system C2 system. **C2 tools** (VTC, Home Page) used to push or pull information and authoritative directives

(e.g., fragmentary order) are mentioned separately in a few joint publications.

- i. **Multinational C2 Considerations.** The vast majority of approved and draft publications cover multinational considerations regarding organization, command relationships, or publication-specific subjects to some extent. JPs 1, 0-2, 3-0, 3-16 (FC), and 5-00.2 are key and cover the importance of cooperation, mutual respect, unity of effort, coordination, and liaison; role of the JFC; command relationships; force integration; the difference between alliances and coalitions; and multinational command structures. JPs 3-0 and 3-16 (FC) make a special effort to outline the unique considerations for operating in a **coalition environment**. Most other publications repeat parts of the above and address the unique aspects of multinational operations regarding the subject area (e.g., intelligence architecture, C4 system support, SOF command relationships, and counterair threats dissemination).
- j. **Interagency Coordination.** JP 3-08 is designed to provide guidance on interagency coordination from the theater to JTF level. This two-volume publication thoroughly addresses all aspects of coordination with government, NGO, PVO, and other organizations. It specifically recommends some techniques such as the HOC, CMOC, using liaison officers/teams, and establishing agreements with the various agencies. Other publications repeat or expand on the basic doctrine in JP 3-08 for some unique situations such as foreign humanitarian assistance.
- k. **Interface of Civil Command Structure with JFCs.** Emerging JTTP on domestic support operations in JP 3-07.7 (PC) is the primary source for guidance regarding the interface of military commanders and organizations with civil authorities. A comprehensive list of civil authorities and their functions and an explanation of command relationships during various types of domestic emergencies is provided. JP 3-08 Vol I also addresses the interaction and coordination with state and local authorities and the doctrine on base defense provides some guidance on coordination with local authorities.
- l. **C2 During Asymmetric Operations (MOOTW).** Each publication in the JP 3-07 series has specific guidance tailored to the subject area (e.g., counterdrug, NEO, FHA etc.). The C2 topics of organization and command relationships seem to be thoroughly covered and numerous figures are provided for clarification.

Intentionally Blank

CHAPTER IV

CONCLUSIONS

“Command is central to all military action, and unity of command is central to unity of effort.”

JP 0-2, “Unified Action Armed Forces (UNAAF)”

1. Command and control and C2-related subjects are discussed in nearly every joint publication. Overall; consistency, adequate depth, and references to other joint publications or CJCS directives for additional guidance are common attributes.
 - a. Key C2 subject areas (e.g., command relationships, organization, multinational C2) are common to several joint publications.
 - b. C2 concepts and principles are tailored in focus and depth to serve the individual joint publication’s purpose (e.g., JP 3-07.5, “JTTP for Noncombatant Evacuation Operations”).
2. There are key joint publications that serve as primary references for C2 guidance.
 - a. JP 0-2 serves as the key resource for basic C2 doctrine (e.g., command relationships) and general guidance for C2 at the strategic and operational levels (e.g., joint force organization). It is the C2 centerpiece for the joint community.
 - b. JP 3-0 is both an expanding and redundant resource for C2 guidance addressed in JP 0-2.
 - c. JP 6-0 is the primary reference for C4 systems support.
 - d. JP 5-00.2 serves as the key resource for JTF organization, C2, and C4 systems support.
 - e. JP 3-56.1 serves as a specialized resource for joint air operations C2.
 - f. JP 3-08 Vol I is the main resource for interagency C2 considerations.
 - g. JP 3-16 (FC) is the primary reference for C2 of multinational operations.

3. Most of the C2 Working Group subject areas listed in Appendix B are adequately addressed in joint publications. Examples are: basic C2 definitions and tenets, command relationships, organization of joint forces and the JFC's staff, staff and commander's estimates, COA development, organization of the operational areas, multinational/coalition considerations, interagency coordination, and C2 during MOOTW.
4. Some of the C2 Working Group subject areas listed in Appendix B are addressed in joint publications under a different label. Examples are: the joint operation planning system as a decisionmaking model, JOPES as a collaborative planning tool, joint force organization and command relationships as a warfighting model, C4 systems as C2 (information) systems, OPOD and annex formats as guidance to write orders, timeliness and accuracy of information as fidelity of information, and determining desired effects as effects-based operations.
5. Some of the C2 Working Group subject areas listed in Appendix B are not covered or are very lightly addressed in joint publications. Examples are: flattening, span of control, reachback, information management, the difference between C2 systems and weapons systems C2 systems, and database management.
6. Some of the C2 Working Group subject areas listed in Appendix B are addressed in more detail in CJCS directives than in joint publications. Examples are: COP, writing orders, information management, and database management.
7. The Navy and Marine Corps have developed a separate publication on C2. The Air Force is developing a C2 publication. The included subject areas seem to parallel those suggested by the C2 Working Group.
8. The development of a separate joint publication on C2 has failed before and will require more time and effort than modification of an existing joint publication(s).
9. One joint publication will not be comprehensive enough to address all aspects of C2 in every situation. Tailored C2 guidance in other joint publications for each type of operation or activity will still be required.
10. The essential C2 fundamentals are contained in JP 0-2 and it could be expanded, modified, and strengthened to serve as a more comprehensive foundation for subordinate joint publications. It has a long history and is the most likely publication to be used as a reference by joint force commanders and staffs, component commanders and staff, and education institutions.

CHAPTER V

RECOMMENDATIONS

“Control is inherent in command. To control is to regulate forces and functions to execute the commander’s intent.”

JP 3-0, “Doctrine for Joint Operations”

1. Reject proposals to develop a separate joint C2 publication.
2. Revise and expand Chapter III, “Command Relationships,” in JP 0-2 to include new or expanded guidance on basic C2 theory and tenets, the JFC’s role, C2 considerations for multiple contingencies in one AOR, decisionmaking and collaborative planning, information management, written and verbal orders, common operational picture, span of control, reachback, the role of (C4) information systems, interagency coordination, civil-military relationships, and multinational force C2 considerations.
 - a. Retain the existing guidance on command relationships and revise to include expanded discussion of direct and general support, and clarification of positioning authority under OPCON, TACON, and support relationships.
 - b. Change the title to “Fundamentals of Joint Force Command and Control.”
3. Strengthen and expand Chapter IV, “Doctrine and Policy for Joint Commands,” in JP 0-2 to include basic, general guidance and information on joint force organization elements; the theater-level C2 structure; joint force staff organization options, C2 nodes such as boards, centers, cells, elements, liaison organizations, and interagency coordination organizations; and multinational force structures and staff integration.
 - a. Retain, or revise accordingly, the existing guidance on the policy and authority for establishing joint commands; the commander, staff, and components of a joint force; and discipline and personnel administration.
 - b. Change the title of Chapter IV to “Fundamentals of Joint Force Organization.”

Intentionally Blank

APPENDIX A**COMMAND AND CONTROL DOCTRINE WORKING GROUP
MESSAGE**

FM JOINT STAFF WASHINGTON DC//J7//
TO AIG 7029
SUBJ/ANNOUNCEMENT OF COMMAND AND CONTROL (C2) DOCTRINE
WORKING
GROUP//
REF/A/DOCUMENT/JOINT STAFF, J-7/DRAFT MINUTES OF JOINT
DOCTRINE WORKING PARTY (JDWP), 14-15 OCTOBER 1998//
AMPN/DRAFT MINUTES OF JDWP DISCUSS THE UNANIMOUS VOTE TO
CONVENE A COMMAND AND CONTROL DOCTRINE WORKING GROUP//
POC/RUTH A. MOHR/CDR, JOINT STAFF, J-7/ (703) 697-1046, DSN: 227-
1046//

1. PURPOSE: THE PURPOSE OF THIS MESSAGE IS TO ANNOUNCE THE
COMMAND
AND CONTROL (C2) DOCTRINE WORKING GROUP ESTABLISHED BY
UNANIMOUS VOTE AT THE 14-15 OCTOBER JOINT DOCTRINE WORKING
PARTY (JDWP). THIS C2 WORKING GROUP WILL CONVENE 9-10 DECEMBER
1998 AT THE JOINT WARFIGHTING CENTER (JWFC), FORT MONROE,
VIRGINIA PER REFERENCE A. IT WILL BE JOINTLY CHAIRED BY JOINT
STAFF, J-3, (COLONEL MURPHY, J38/DSOD) AND THE US ARMY (MR GARY
BOUNDS, US ARMY) AND WILL PROVIDE RECOMMENDATIONS TO THE
JOINT STAFF, J-7 WITHIN 90 DAYS.

2. REQUEST ALL ADDRESSEES SEND REPRESENTATIVES TO THIS
WORKING GROUP. REPRESENTATIVES SHOULD HAVE AN IN-DEPTH
UNDERSTANDING OF THE COMMAND PROCESSES OF THE JOINT FORCE
COMMANDER (JFC). MEETING OBJECTIVES PER REFERENCE A ARE AS
FOLLOWS: (1) IDENTIFY WHAT SHORTFALLS EXIST IN JOINT COMMAND
AND CONTROL DOCTRINE? (2) BASED ON THE ANSWER TO (1), SHOULD
THERE BE A SEPARATE C2 JOINT PUB OR SHOULD C2 ISSUES BE FOLDED
INTO EXISTING PUBS? (3) IF A SEPARATE PUB IS REQUIRED, WHAT
NUMBER SHOULD IT BE? (4) DEVELOP A DRAFT SCOPE OF THE PROGRAM
DIRECTIVE. (5) DETERMINE THE DISPOSITION OF REMAINING TOPICS
REQUIRED UNDER THE AMENDED PROGRAM DIRECTIVE FOR JP 3-56,
"COMMAND AND CONTROL DOCTRINE FOR JOINT OPERATIONS."

3. RESPOND NO LATER THAN 16 NOVEMBER 1998 TO MAJ BURT MILLER,
JWFC WITH THE NAME OF YOUR COMMAND'S REPRESENTATIVE AND
SECURITY CLEARANCE INFORMATION (NAME, RANK, SSAN,
COMMAND/ORGANIZATION, CLEARANCE, PHONE NUMBER, AND E-MAIL.)

CONFERENCE FEE WILL BE \$5.00. POINT OF CONTACT AT JWFC, FORT MONROE IS MAJ BURT MILLER, DSN 680-6406, COMMERCIAL (757) 726-6406, FAX DSN 680-6552, FAX COMMERCIAL (757) 726-6552. JOINT STAFF, J-3 POINT OF CONTACT IS MAJ PAUL SMILEY, DSN 224-9348, COMMERCIAL (703) 614-9348. US ARMY POINT OF CONTACT IS MR. GARY BOUNDS, DSN 227-6949, COMMERCIAL (703) 697-6949.//

APPENDIX B

COMMAND AND CONTROL DOCTRINE WORKING GROUP SUBJECT AREAS

1. C2 Description and Theory

- a. Describe the “art and science of C2”
 - (1) Definitions
 - (2) Purpose (maximum integration and minimum deconfliction)
 - (3) C2 is essential authority and processes of the commander
 - (4) Includes more than operations: people, intelligence, logistics, communications, spectrum, etc.
- b. Basic tenets of C2 (discussion of the key principles)
- c. C2 decision making model
- d. Warfighting model

2. Theater/JFC-level C2

- a. Relationship of the C2 decision-making model to JFC’s C2 tasks
 - (1) Observe, orient, decide, and act (OODA), or Understand, Plan, Command, Control, etc., of all joint forces and across functional areas
 - (2) General discussion of synchronization of forces and staff functions
- b. Essential theater-level C2 structure
 - (1) Theater-wide intelligence architecture
 - (2) Theater-wide surveillance and reconnaissance architecture
 - (3) Theater-wide communications and computer architecture
 - (4) Theater-wide spectrum and information management
 - (5) Theater-wide COP (discussion of CTP and SIAP)

(6) Others? (Transportation, Information grid, etc.)

- c. Alternate to chain of command/C2 nodes
- d. JFC's role in execution as synchronization of component's execution
- e. Multinational considerations
- f. C2 outside theater and en route for expeditionary forces
- g. Effects-based operations

3. **Command Relationships**

a. Strategic Level

(1) Functional combatant commanders interface with geographical combatant commanders

(2) Interface with Nationally-controlled assets?

(a) How to get them is appropriate

(b) Link between National assets and the JFC

b. Operational/Tactical Level

(1) Basic command relationships

(a) Discussion of standard command relationships

(b) Clarification/refinement of support relationship below combatant command level

(c) Expanded discussion of support relationships (direct, general, etc.)

(d) Clarification of command relationships (positioning authority)

(2) C2 for multiple contingencies in one AOR

c. Multinational considerations

4. **Organization of Joint Forces**

a. Basic organizing principles

b. Delineation between functional commands and battlespace operating functions, functional component definition (environmental vs. battlespace functional organization)

(1) Will not tinker with the definition of functional component

(2) Clarify functional command responsibilities

c. Considerations for dual-hating

d. Multinational considerations

5. **Organization of the JFC's Staff**

a. Guidelines on selection, formation, organization of the JFC' staff (bridge JPs 0-2 and 5-00.2)

b. Balanced discussion of joint staff options and factors

c. Multinational considerations

6. **JFC's Staff Processes**

a. C2 nodes and echelons proliferation (flattening)

b. Span of control

c. Reachback

d. Collaborative planning

e. Writing orders

f. Information management

(1) How information is exchanged on the staff

(2) Difference between intelligence and information

(3) Difference between planning information and battle management information

(4) Relationship of information and information management to C2 process

g. COA Development and analysis

- h. Commander's Estimate process
 - i. Boards and agencies, and their proliferation
 - j. Fidelity of information for various levels of C2
7. **Organization of the "Theater" "Area" or " Battlespace" (How?)**
8. **C2 Systems (Information Systems?)**
- a. C2 Systems and their relationship to the JFC's C2 process
 - b. Distinction between information C2 systems and weapons system C2 systems
 - c. Relationship between C2 systems (VTC, Home Page) and process (fragmentary order)
9. **Other**
- a. Coalition C2 guidance
 - b. Interagency C2 guidance
 - c. Interplay of civil command structure with JFCs
 - d. C2 and nontraditional operations or asymmetric operations (MOOTW)
 - e. Database management/control/authority to change
 - f. Definitions (CCIR, SA, COP, CTP)

GLOSSARY

PART I—ABBREVIATIONS AND ACRONYMS

AADC	area air defense commander
ACA	airspace coordination authority
ACP	air control plan
ADP	automatic data processing
AFCC	Air Force Component Commander
ALCC	airlift coordination cell
AOA	amphibious objective area
AOC	air operations center
AOR	area of responsibility
ATO	air tasking order
BDA	battle damage assessment
C2	command and control
C2S	command and control system
C3	command, control, and communications
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
CA	civil affairs
CAP	crisis action planning
CATF	commander, amphibious task force
CCIR	commander's critical information requirements
CD	counterdrug
CFST	coalition forces support team
CINC	commander of a combatant command, commander in chief
CJCS	Chairman of the Joint Chiefs of Staff
CJTF	commander, joint task force
CMOC	civil-military operations center
COA	course of action
COP	common operational picture
CSAR	combat search and rescue
CTP	common tactical picture
COCOM	combatant command (command authority)
DCA	defensive counterair
DCO	defense coordinating officer
DIA	Defense Intelligence Agency
DISA	Defense Information Systems Agency
DOD	Department of Defense

EW	electronic warfare
FC	final coordination
FHA	foreign humanitarian assistance
FID	foreign internal defense
GCCS	Global Command and Control System
HN	host nation
HOC	humanitarian operations center
HQ	headquarters
IC3	Integrated Command, Control, and Communications System
IO	information operations, international organizations
JAOC	joint air operations center
JCMOTF	Joint Civil-Military Operations Task Force
JFACC	joint force air component commander
JFC	joint force commander
JFE	joint fires element
JFLCC	joint force land component commander
JFMCC	joint force maritime component commander
JFSOCC	joint force special operations component commander
JIC	joint intelligence center
JIPB	joint intelligence preparation of the battlespace
JISE	joint intelligence support element
JOA	joint operations area
JOC	joint operations center
JOPES	Joint Operation Planning and Execution System
JP	joint publication
JPOTF	joint psychological operations task force
JRA	joint rear area
JRAC	joint rear area coordinator
JRTOC	joint rear tactical operations center
JSOA	joint special operations area
JSOTF	joint special operations task force
JSRC	joint search and rescue center
JTCB	joint targeting coordination board
JTF	joint task force
JTMD	joint theater missile defense
JTTP	joint tactics techniques and procedures
JWFC	Joint Warfighting Center
LEA	law enforcement agencies
LNO	liaison officer

LRC	logistics readiness center
METOC	meteorological and oceanographic
MNFC	multinational force commander
MOOTW	Military Operations Other Than War
MSC	Military Sealift Command
NATO	North Atlantic Treaty Organization
NBC	nuclear, biological, and chemical
NCA	National Command Authorities
NGO	nongovernmental organizations
NIST	national intelligence support team
NMJIC	National Military Joint Intelligence Center
NSA	National Security Agency
NSW	naval special warfare
OGA	other government agencies
OPCON	operational control
OPLAN	operation plan
OPORD	operation order
PAO	public affairs officer
PC	preliminary coordination
PK	peacekeeping
PO	peace operations
POL	petroleum, oils, and lubricants
PSYOP	psychological operations
PVO	private voluntary organizations
RC	reserve component
RCC	rescue coordination center
RFI	request for information
ROE	rules of engagement
SOCCE	special operations command and control element
SOCOORD	special operations coordination element
SOF	special operations forces
SOLE	special operations liaison element
TACON	tactical control
TPFDD	time-phased force and deployment data
TRAP	tactical recovery of aircraft and personnel (Marine Corps)
UN	United Nations
USACOM	US Atlantic Command
USCINACOM	Commander in Chief, United States Atlantic Command

USCINCSOC	Commander in Chief, United States Special Operations Command
USCINCTRANS	Commander in Chief, United States Transportation Command
USMC	US Marine Corps
USSOCOM	US Special Operations Command
USTRANSCOM	US Transportation Command
VTC	video teleconferencing

PART II—TERMS AND DEFINITIONS

administrative control--Direction or exercise of authority over subordinate or other organizations in respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations. Also called **ADCON**. (JP 1-02)

airlift coordination cell--A cell within the air operations center which plans, coordinates, manages, and executes theater airlift operations in the area of responsibility or joint operations area. Normally consists of an airlift plans branch, an airlift operations branch, and an airlift support branch. Also called **ALCC**. See also **air operations center; area of responsibility**. (JP 1-02)

air operations center--The principal air operations installation from which aircraft and air warning functions of combat air operations are directed, controlled, and executed. It is the senior agency of the Air Force Component Commander from which command and control of air operations are coordinated with other components and Services. Also called **AOC**. (JP 1-02)

airspace control authority--The commander designated to assume overall responsibility for the operation of the airspace control system in the airspace control area. (JP 1-02)

air tasking order--A method used to task and disseminate to components, subordinate units, and command and control agencies projected sorties/capabilities/forces to targets and specific missions. Normally provides specific instructions to include call signs, targets, controlling agencies, etc., as well as general instructions. Also called **ATO**. (JP 1-02)

area air defense commander--Within a unified command, subordinate unified command, or joint task force, the commander will assign overall responsibility for air defense to a single commander. Normally, this will be the component commander with the preponderance of air defense capability and the command, control, and communications capability to plan and execute integrated air defense operations. Representation from the other components involved will be provided, as appropriate, to the area air defense commander's headquarters. Also called **AADC**. (JP 1-02)

area of operations--An operational area defined by the joint force commander for land and naval forces. Areas of operation do not typically encompass the entire operational area of the joint force commander, but should be large enough for component commanders to accomplish their missions and

protect their forces. See also **area of responsibility; joint operations area.** (JP 1-02)

area of responsibility--1. The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations. 2. In naval usage, a predefined area of enemy terrain for which supporting ships are responsible for covering by fire on known targets or targets of opportunity and by observation. Also called **AOR.** (JP 1-02)

base cluster operations center--A command and control facility that serves as the base cluster commander's focal point for defense and security of the base cluster. (JP 1-02)

base defense operations center--A command and control facility established by the base commander to serve as the focal point for base security and defense. It plans, directs, integrates, coordinates, and controls all base defense efforts, and coordinates and integrates into area security operations with the rear area operations center/rear tactical operations center. (JP 1-02)

close support--That action of the supporting force against targets or objectives which are sufficiently near the supported force as to require detailed integration or coordination of the supporting action with the fire, movement, or other actions of the supported force. See also **direct support; general support; mutual support; support.** (JP 1-02)

combatant command--A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. See also **specified command; unified command.** (JP 1-02)

combatant command (command authority)--Nontransferable command authority established by title 10 ("Armed Forces"), United States Code, section 164, exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the Secretary of Defense. Combatant command (command authority) cannot be delegated and is the authority of a combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. Combatant command (command authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Combatant command

(command authority) provides full authority to organize and employ commands and forces as the combatant commander considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority). Also called **COCOM**. See also **combatant command; combatant commander; operational control; tactical control**. (JP 1-02)

combatant commander--A commander in chief of one of the unified or specified combatant commands established by the President. See also **combatant command**. (JP 1-02)

command--1. The authority that a commander in the Armed Forces lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organizing, directing, coordinating, and controlling military forces for the accomplishment of assigned missions. It also includes responsibility for health, welfare, morale, and discipline of assigned personnel. 2. An order given by a commander; that is, the will of the commander expressed for the purpose of bringing about a particular action. 3. A unit or units, an organization, or an area under the command of one individual. See also **combatant command; combatant command (command authority)**. (JP 1-02)

command and control--The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called **C2**. (JP 1-02)

commander's critical information requirements--A comprehensive list of information requirements identified by the commander as being critical in facilitating timely information management and the decision making process that affect successful mission accomplishment. The two key subcomponents are critical friendly force information and priority intelligence requirements. Also called **CCIR**. (JP 5-00.2)

command relationships--The interrelated responsibilities between commanders, as well as the authority of commanders in the chain of command. (JP 1-02)

component--1. One of the subordinate organizations that constitute a joint force. Normally a joint force is organized with a combination of Service and functional components. 2. In logistics, a part or combination of parts having a specific function, which can be installed or replaced only as an

entity. See also **functional component command; Service component command**. (JP 1-02)

control--1. Authority which may be less than full command exercised by a commander over part of the activities of subordinate or other organizations. 2. In mapping, charting, and photogrammetry, a collective term for a system of marks or objects on the Earth or on a map or a photograph, whose positions or elevations, or both, have been or will be determined. 3. Physical or psychological pressures exerted with the intent to assure that an agent or group will respond as directed. 4. An indicator governing the distribution and use of documents, information, or material. Such indicators are the subject of intelligence community agreement and are specifically defined in appropriate regulations. See also **operational control; tactical control**. (JP 1-02)

coordinating authority--A commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more Military Departments or two or more forces of the same Service. The commander or individual has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement. In the event that essential agreement cannot be obtained, the matter shall be referred to the appointing authority. Coordinating authority is a consultation relationship, not an authority through which command may be exercised. Coordinating authority is more applicable to planning and similar activities than to operations. (JP 1-02)

direct liaison authorized--That authority granted by a commander (any level) to a subordinate to directly consult or coordinate an action with a command or agency within or outside of the granting command. Direct liaison authorized is more applicable to planning than operations and always carries with it the requirement of keeping the commander granting direct liaison authorized informed. Direct liaison authorized is a coordination relationship, not an authority through which command may be exercised. Also called **DIRLAUTH**. (JP 1-02)

direct support--A mission requiring a force to support another specific force and authorizing it to answer directly the supported force's request for assistance. See also close support; general support; mutual support; support. (JP 1-02)

fragmentary order--An abbreviated form of an operation order, usually issued on a day-to-day basis, that eliminates the need for restating information contained in a basic operation order. It may be issued in sections. (JP 1-02)

functional component command--A command normally, but not necessarily, composed of forces of two or more Military Departments which may be

established across the range of military operations to perform particular operational missions that may be of short duration or may extend over a period of time. See also **component; Service component command**. (JP 1-02)

general support--That support which is given to the supported force as a whole and not to any particular subdivision thereof. See also close support; direct support; mutual support; support. (JP 1-02)

joint air operations center--A jointly staffed facility established for planning, directing, and executing joint air operations in support of the joint force commander's operation or campaign objectives. Also called **JAOC**. (JP 1-02)

joint force air component commander--The joint force air component commander derives authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The joint force commander will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation, and tasking based on the joint force commander's apportionment decision). Using the joint force commander's guidance and authority, and in coordination with other Service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas. Also called **JFACC**. See also **joint force commander**. (JP 1-02)

joint force commander--A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called **JFC**. (JP 1-02)

joint force land component commander--The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of land forces, planning and coordinating land operations, or accomplishing such operational missions as may be assigned. The joint force land component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force land component commander will normally be the commander with the preponderance of land forces and the requisite command and control capabilities. Also called **JFLCC**. (JP 1-02)

joint force maritime component commander--The commander within a unified command, subordinate unified command, or joint task force

responsible to the establishing commander for making recommendations on the proper employment of maritime forces and assets, planning and coordinating maritime operations, or accomplishing such operational missions as may be assigned. The joint force maritime component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force maritime component commander will normally be the commander with the preponderance of maritime forces and the requisite command and control capabilities. Also called **JFMCC**. (JP 1-02)

joint force special operations component commander--The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of special operations forces and assets, planning and coordinating special operations, or accomplishing such operational missions as may be assigned. The joint force special operations component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force special operations component commander will normally be the commander with the preponderance of special operations forces and the requisite command and control capabilities. Also called **JFSOCC**. (JP 1-02)

joint special operations task force--A joint task force composed of special operations units from more than one Service, formed to carry out a specific special operation or prosecute special operations in support of a theater campaign or other operations. The joint special operations task force may have conventional nonspecial operations units assigned or attached to support the conduct of specific missions. Also called **JSOTF**. (JP 1-02)

joint staff--1. The staff of a commander of a unified or specified command, subordinate unified command, joint task force, or subordinate functional component (when a functional component command will employ forces from more than one Military Department), which includes members from the several Services comprising the force. These members should be assigned in such a manner as to ensure that the commander understands the tactics, techniques, capabilities, needs, and limitations of the component parts of the force. Positions on the staff should be divided so that Service representation and influence generally reflect the Service composition of the force. . . (JP 1-02)

joint targeting coordination board--A group formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and preparing and/or refining joint target lists. The board is normally comprised of representatives from the joint force staff, all components, and if required, component subordinate units. Also called **JTCB**. (JP 1-02)

joint task force--A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. Also called **JTF**. (JP 1-02)

liaison--That contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action. (JP 1-02)

mission type order--1. Order issued to a lower unit that includes the accomplishment of the total mission assigned to the higher headquarters. 2. Order to a unit to perform a mission without specifying how it is to be accomplished. (JP 1-02)

mutual support--That support which units render each other against an enemy, because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities. See also **close support; direct support; support**. (JP 1-02)

operational authority--That authority exercised by a commander in the chain of command, defined further as combatant command (command authority), operational control, tactical control, or a support relationship. See also **combatant command (command authority); operational control; support; tactical control**. (JP 1-02)

operational control--Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority). Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called **OPCON**. See also **combatant command; combatant command (command authority); tactical control**. (JP 1-02)

operational level of war--The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. See also **strategic level of war; tactical level of war**. (JP 1-02)

operation order--A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called **OPORD**. (JP 1-02)

operations center--The facility or location on an installation, base, or facility used by the commander to command, control, and coordinate all crisis activities. See also **base defense operations center**. (JP 1-02)

order--A communication, written, oral, or by signal, which conveys instructions from a superior to a subordinate. (DOD) In a broad sense, the terms "order" and "command" are synonymous. However, an order implies discretion as to the details of execution whereas a command does not. (JP 1-02)

responsibility--1. The obligation to carry forward an assigned task to a successful conclusion. With responsibility goes authority to direct and take the necessary action to ensure success. 2. The obligation for the proper custody, care, and safekeeping of property or funds entrusted to the possession or supervision of an individual. (JP 1-02)

Service component command--A command consisting of the Service component commander and all those Service forces, such as individuals, units, detachments, organizations, and installations under the command, including the support forces that have been assigned to a combatant command, or further assigned to a subordinate unified command or joint task force. See also **component; functional component command**. (JP 1-02)

special operations command--A subordinate unified or other joint command established by a joint force commander to plan, coordinate, conduct, and support joint special operations within the joint force commander's assigned area of operations. Also called **SOC**. (JP 1-02)

special staff--All staff officers having duties at a headquarters and not included in the general (coordinating) staff group or in the personal staff group. The special staff includes certain technical specialists and heads of

services, e.g., quartermaster officer, antiaircraft officer, transportation officer, etc. See also **staff**. (JP 1-02)

specified command--A command that has a broad, continuing mission, normally functional, and 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 a single Military Department. Also called **specified combatant command**. (JP 1-02)

strategic level of war--The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) security objectives and guidance, and develops and uses national resources to accomplish these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of national power; develop global plans or theater war plans to achieve these objectives; and provide military forces and other capabilities in accordance with strategic plans. See also **operational level of war; tactical level of war**. (JP 1-02)

subordinate command--A command consisting of the commander and all those individuals, units, detachments, organizations, or installations that have been placed under the command by the authority establishing the subordinate command. (JP 1-02)

subordinate unified command--A command established by commanders of unified commands, when so authorized through the Chairman of the Joint Chiefs of Staff, to conduct operations on a continuing basis in accordance with the criteria set forth for unified commands. A subordinate unified command may be established on an area or functional basis. Commanders of subordinate unified commands have functions and responsibilities similar to those of the commanders of unified commands and exercise operational control of assigned commands and forces within the assigned joint operations area. Also called **subunified command**. See also **functional component command; operational control; subordinate command; unified command**. (JP 1-02)

support--1. The action of a force which aids, protects, complements, or sustains another force in accordance with a directive requiring such action. 2. A unit which helps another unit in battle. Aviation, artillery, or naval gunfire may be used as a support for infantry. 3. A part of any unit held back at the beginning of an attack as a reserve. 4. An element of a command which assists, protects, or supplies other forces in combat. See also **close support; direct support; general support; mutual support**. (JP 1-02)

supported commander--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 operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. (JP 1-02)

supporting commander--A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. Includes the designated combatant commands and Defense agencies as appropriate. See also **supported commander**. (JP 1-02)

synchronization--1. The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time. . . (JP 1-02)

tactical control--Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. Also called **TACON**. See also **combatant command; combatant command (command authority); operational control**. (JP 1-02)

tactical level of war--The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives. See also **operational level of war; strategic level of war**. (JP 1-02)

transient forces--Forces which pass or stage through, or base temporarily within, the area of responsibility or joint operations area of another command but are not under its operational control. (JP 1-02)

unified action--A broad generic term that describes the wide scope of actions (including the synchronization of activities with governmental and non-governmental agencies) taking place within unified commands, subordinate unified commands, or joint task forces under the overall direction of the commanders of those commands. See also **joint task force; subordinate unified command; unified command**. (JP 1-02)

unified command--A command with a broad continuing mission under a single commander and composed of significant assigned components of two or more Military Departments, 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. Also called **unified combatant command**. See also **combatant command; subordinate unified command**. (JP 1-02)

Intentionally Blank

ENDNOTES

-
- ¹ JP 1-02, "DOD Dictionary of Military and Associated Terms"
 - ² JP 1-02
 - ³ JP 1-02
 - ⁴ JP 1-02
 - ⁵ JP 0-2, "Unified Action Armed Forces (UNAAF), III-1
 - ⁶ JP 3-0, "Doctrine for Joint Operations," II-16
 - ⁷ JP 3-0, II-17
 - ⁸ JP 3-0, II-17
 - ⁹ JP 3-0, II-17
 - ¹⁰ JP 3-0, III-1
 - ¹¹ JP 3-0, A-2
 - ¹² JP 1, "Joint Warfare of the Armed Forces of the United States," III-9
 - ¹³ JP 1, III-9
 - ¹⁴ JP 1, III-10
 - ¹⁵ JP 1, III-10
 - ¹⁶ JP 5-00.2, "Joint Task Force Planning Guidance and Procedures," IV-1
 - ¹⁷ JP 5-00.2, II-29
 - ¹⁸ JP 4-01.1, "JTTP for Airlift Support to Joint Operations," I-4
 - ¹⁹ JP 3-10.1, "JTTP for Base Defense," II-1
 - ²⁰ JP 3-50.2, "Doctrine for Joint Combat Search and Rescue," III-7
 - ²¹ JP 5-0, "Doctrine for Planning Joint Operations," viii
 - ²² JP 3-13.1, "Joint Doctrine for Command and Control Warfare (C2W)," A-1
 - ²³ JP 2-0, "Joint Doctrine for Intelligence Support to Joint Operations," viii
 - ²⁴ JP 2-01, "Joint Intelligence Support to Military Operations," III-44
 - ²⁵ JP 2-01, GL-10
 - ²⁶ JP 1-02 and JP 2-02, GL-12
 - ²⁷ JP 3-56.1, "Command and Control for Joint Air Operations," IV-1
 - ²⁸ JP 3-08 "Interagency Coordination for Joint Operations Vol I," I-5
 - ²⁹ JP 4-05.1, "JTTP for Manpower Mobilization and Demobilization Operations:
Reserve Component (RC) Callup," viii
 - ³⁰ JP 2-0, VII-1
 - ³¹ JP 2-0, VII-2
 - ³² JP 2-0, VII-3
 - ³³ JP 2-0, VII-3
 - ³⁴ JP 4-0, "Doctrine for Logistic Support to Joint Operations," II-5
 - ³⁵ JP 4-0, II-6
 - ³⁶ JP 3-05, "Doctrine for Joint Special Operations," III-2,3
 - ³⁷ JP 3-05, III-5
 - ³⁸ JP 3-17, "JTTP for Theater Airlift Operations," II-1
 - ³⁹ JP 3-17, II-1
 - ⁴⁰ JP 5-00.2, i
 - ⁴¹ JP 5-00.2, IV-6
 - ⁴² JP 5-00.2, IV-9
 - ⁴³ JP 3-52, "Doctrine for Joint Airspace Control in a Combat Zone," II-2
 - ⁴⁴ JP 6-0, "Doctrine for Command, Control, Communications, and Computer (C4)
Systems Support to Joint Operations," viii
 - ⁴⁵ JP 5-00.2, VII-4

-
- 46 JP 5-00.2, VII-5
47 JP 5-00.2, VII-6
48 JP 5-00.2, II-29
49 JP 5-00.2, II-30
50 JP 0-2, IV-14
51 JP 3-05, III-7
52 JP 3-05, III-7
53 JP 3-17, II-1
54 JP 3-10.1, II-2
55 JP 3-10.1, II-8
56 JP 3-10.1, II-10
57 JP 3-50.2, III-6
58 JP 3-50.2, III-8
59 JP 3-09, "Doctrine for Joint Fire Support," II-15
60 JP 3-0, II-5
61 JP 3-03, "Doctrine for Joint Interdiction Operations," viii
62 JP 3-0, II-17
63 JP 3-0, III-11
64 JP 3-03, II-2
65 JP 3-08 Vol I, II-13
66 JP 3-09, I-4
67 JP 5-0, II-18
68 JP 5-00.2, VII-13
69 JP 5-00.2, IX-51
70 JP 1, III-13
71 JP 1, III-13
72 JP 1, III-14
73 JP 1, III-14
74 JP 0-2, I-3
75 JP 3-0, VI-6
76 JP 3-0, VI-6
77 JP 3-0, VI-6
78 JP 3-0, VI-8
79 JP 3-0, VI-10
80 JP 5-00.2, I-5
81 JP 2-0, VIII-1
82 JP 3-50.2, III-8
83 JP 0-2, III-5
84 JP 0-2, IV-2
85 JP 5-00.2, IV-4
86 JP 5-00.2, IV-4
87 JP 3-10.1, II-6
88 JP 3-03, v
89 JP 3-03, v
90 JP 3-03, ix
91 JP 3-09, vi
92 JP 3-09, vii
93 JP 3-09, I-5

-
- ⁹⁴ JP 3-0, I-3, 4
⁹⁵ JP 1-02
⁹⁶ JP 0-2, III-5
⁹⁷ JP 0-2, III-8
⁹⁸ JP 0-2, III-9,10
⁹⁹ JP 1-02
¹⁰⁰ JP 0-2, III-10
¹⁰¹ JP 3-0, II-8
¹⁰² JP 1-02
¹⁰³ JP 5-00.2, II-4
¹⁰⁴ JP 1-02
¹⁰⁵ JP 5-00.2, II-5
¹⁰⁶ JP 3-05, III-1
¹⁰⁷ JP 3-05, III-2
¹⁰⁸ JP 4-01.1, "Joint Doctrine for the Defense Transportation System," I-4
¹⁰⁹ JP 4-01.1, I-4
¹¹⁰ JP 3-53, "Doctrine for Joint Psychological Operations," III-2
¹¹¹ JP 0-2, IV-18
¹¹² JP 3-0, II-15
¹¹³ JP 3-03, "Doctrine for Joint Interdiction Operations," II-8,9
¹¹⁴ JP 3-05, III-5
¹¹⁵ JP 3-05, III-6
¹¹⁶ JP 3-05, III-6
¹¹⁷ JP 3-53, III-3
¹¹⁸ JP 3-53, III-5
¹¹⁹ JP 3-53, III-6
¹²⁰ JP 3-17, II-1
¹²¹ JP 3-17, II-4
¹²² JP 3-10, "Joint Doctrine for Rear Area Operations," II-1
¹²³ JP 3-50.2, III-1
¹²⁴ JP 3-50.2, III-5
¹²⁵ JP 0-2, IV-3
¹²⁶ JP 5-00.2, IV-9
¹²⁷ JP 3-05, III-2
¹²⁸ JP 3-53, III-2
¹²⁹ JP 3-10, II-13
¹³⁰ JP 5-00.2, II-1
¹³¹ JP 5-00.2, II-1
¹³² JP 5-00.2, II-2
¹³³ JP 3-10, II-10
¹³⁴ JP 0-2, IV-3
¹³⁵ JP 0-2, IV-16
¹³⁶ JP 1-02
¹³⁷ JP 0-2, IV-3,4
¹³⁸ JP 0-2, IV-18,19
¹³⁹ JP 3-0, II-14
¹⁴⁰ JP 5-00.2, III-1
¹⁴¹ JP 5-00.2, III-1

142 JP 5-00.2, III-3
143 JP 5-00.2, III-5
144 JP 5-00.2, III-5
145 JP 5-00.2, III-8
146 JP 5-00.2, III-8
147 JP 5-00.2, III-10
148 JP 3-56.1, I-2
149 JP 3-56.1, I-2
150 JP 3-56.1, II-7
151 JP 3-56.1, II-11
152 JP 3-01.5, "Doctrine for Joint Theater Missile Defense," II-5
153 JP 3-01.5, II-6
154 JP 3-01.5, II-7
155 JP 3-10, II-3
156 JP 3-10, II-10
157 JP 0-2, IV-10
158 JP 5-00.2, II-6
159 JP 5-00.2, II-10
160 JP 0-2, IV-2
161 JP 0-2, I-10
162 JP 3-0, VI-12
163 JP 3-53, III-3
164 JP 1-0, V-2
165 JP 1-0, V-2
166 JP 0-2, IV-12
167 JP 5-00.2, II-2
168 JP 4-0, B-1
169 JP 5-00.2, II-2
170 JP 1-0, V-1
171 JP 5-00.2, II-2
172 JP 5-00.2, II-24
173 JP 4-0, B-1
174 JP 3-13, "Joint Doctrine for Information Operations," IV-2
175 JP 3-53, III-2
176 JP 5-00.2, II-5
177 JP 5-00.2, II-6
178 JP 5-00.2, II-11
179 JP 5-00.2, II-11
180 JP 5-00.2, II-13
181 JP 3-13, IV-2
182 JP 0-2, IV-10
183 JP 0-2, IV-11
184 JP 0-2, IV-11
185 JP 0-2, I-11
186 JP 5-00.2, II-21
187 JP 5-00.2, II-24
188 JP 5-00.2, II-25
189 JP 3-56.1, II-11

190 JP 5-00.2, Fig III-4 III-7, Fig III-5 III-9, Fig III-6, III-10
191 JP 3-10, II-12
192 JP 2-02, "National Intelligence Support to Joint Operations," I-1
193 JP 5-00.2, VI-14
194 JP 3-13, I-15
195 JP 3-13, VI-15
196 JP 5-0, I-7
197 JP 5-0, II-2
198 JP 5-00.2, IX-51
199 JP 2-01, III-7
200 JP 3-08 Vol I, III-1
201 JP 3-13, I-7
202 JP 3-13, I-7
203 JP 3-13, I-8
204 JP 5-00.2, IX-50
205 JP 5-00.2, IV-9
206 JP 5-00.2, IX-13
207 JP 4-0, D-1
208 JP 3-52, A-1
209 JP 1-02, As Amended through 10 June 1998, 212
210 JP 1-0, C-1
211 JP 2-0, II-8
212 JP 5-00.2, II-6
213 JP 3-05.3, "Joint Special Operations Operational Procedures," B-9
214 JP 3-07.4, "Joint Counterdrug Operations," H-2
215 JP 3-08 "Interagency Coordination During Joint Operations Vol II," C-G-2
216 JP 3-09, I-4
217 JP 4-05, "Joint Doctrine for Mobilization Planning," I-7
218 JP 4-05, B-2
219 JP 4-05, B-4
220 JP 6-0, I-1
221 JP 6-0, IV-8, 9
222 JP 5-0, III-3
223 JP 5-0, III-13
224 JP 5-00.2, IX-43
225 JP 5-00.2, IX-46
226 JP 5-00.2, IX-46
227 JP 5-00.2, IX-49
228 JP 5-00.2, IV-7
229 JP 1-0, A-1
230 JP 1-0, A-1
231 JP 4-0, IV-4
232 JP 3-0, B-1
233 JP 3-0, B-1
234 JP 3-0, B-2
235 JP 3-0, B-2
236 JP 3-0, B-2
237 JP 3-0, B-3

-
- 238 JP 2-0, III-10
239 JP 3-02, "Joint Doctrine for Amphibious Operations," III-3, 4
240 JP 2-0, VII-7
241 JP 2-0, VII-7
242 JP 3-0, VI-7
243 JP 3-09, I-4
244 JP 3-09, I-6
245 JP 3-13, IV-2
246 JP 3-13, IV-2
247 JP 3-50.2, viii
248 JP 6-0, II-7
249 JP 3-0, III-33
250 JP 5-00.2, Fig I-2, I-2
251 JP 3-05, III-7
252 JP 6-0, i
253 JP 6-0, I-2
254 JP 6-0, I-2
255 JP 6-0, I-3
256 JP 6-0, I-4
257 JP 6-0, I-5
258 JP 6-0, I-5
259 JP 6-0, I-6
260 JP 6-02, "Joint Doctrine for Employment of Operational/Tactical Command,
Control, Communications, and Computer Systems," I-1
261 JP 6-02, I-2
262 JP 6-02, I-5
263 JP 4-0, I-12
264 JP 3-01.5, III-6
265 JP 3-01.5, III-9
266 JP 3-10, II-14
267 JP 3-50.2, III-11
268 JP 3-09, II-4
269 JP 2-0, VII-5
270 JP 2-01, GL-6
271 JP 3-13, I-15
272 JP 1-02
273 JP 3-09.3, "JTTP for Close Air Support (CAS)," V-1
274 JP 3-08 Vol I, I-4
275 JP 3-08 Vol I, III-25
276 JP 5-00.2, II-9
277 JP 3-53, IV-7
278 JP 3-08 Vol I, II-11
279 JP 3-08 Vol I, II-12
280 JP 3-10.1, II-10
281 JP 3-07, "Joint Doctrine for Military Operations Other Than War," IV-4
282 JP 3-07, IV-5
283 JP 3-07.4, IV-11
284 JP 3-07.4, IV-12

285 JP 3-07.4, IV-12
286 JP 3-07.4, IV-13
287 JP 3-07.4, V-7
288 JP 3-07.5, "JTTP for Noncombatant Evacuation Operations," III-1
289 JP 3-07.5, III-1
290 JPs 2-0, II-7; 3-07.4, IV-7
291 JP 5-00.2, GL-6
292 JP 3-11, "Joint Doctrine for Nuclear, Biological, and Chemical Defense
Operations" (FD), D-10, 11
293 JP 2-01.1, "JTTP for Intelligence Support to Targeting" (PC), C-4
294 JP 2-01.3, "JTTP for Joint Intelligence Preparation of the Battlespace" (SD), III-2
295 JP 2-01.3 (SD), GL-16
296 JP 3-55, "Doctrine for Reconnaissance, Surveillance, and Target Acquisition (RSTA)
Support to Joint Operations" (PC), II-3
297 JP 3-01, "Joint Doctrine for Countering Air and Missile Threats" (FC), II-1
298 JP 3-01 (FC), II-2
299 JP 3-01 (FC), II-4
300 JP 3-01 (FC), II-5
301 JP 3-01 (FC), II-7
302 JP 3-35, "Joint Deployment and Redeployment Doctrine" (PC), V-5
303 JP 3-01 (FC), V-6
304 JP 2-01.1 (FC), I-5
305 JP 3-07.6, "JTTP for Foreign Humanitarian Assistance" (PC), II-9
306 JP 3-35 (FC), II-11
307 JP 3-18, "Joint Doctrine for Forcible Entry Operations" (PC), V-1
308 JP 3-16, "Joint Doctrine for Multinational Operations" (FC), IV-1
309 JP 3-16 (FC), IV-3
310 JP 3-16 (FC), II-7
311 JP 3-16 (FC), II-12
312 JP 3-16 (FC), II-15
313 JP 3-07.3, "JTTP for Peace Operations, (FC)" I-23
314 JP 3-07.6 (PC), IV-15
315 JP 3-01 (FC), II-8
316 JP 3-35 (FC), III-8
317 JP 5-00.1, "JTTP for Campaign Planning" (PC), II-11
318 JP 2-0, "Doctrine for Intelligence Support to Joint Operations" (FC), I-3
319 JP 2-01.1 (FC), VI-3
320 JP 2-01.3 (SD), II-14
321 JP 3-01 (FC),
322 JP 3-01 (FC), II-6
323 JP 3-01 (FC), II-7
324 JP 3-18 (PC), II-5
325 JP 3-18 (PC), II-5
326 JP 3-18 (PC), II-6
327 JP 3-18 (PC), II-6
328 JP 3-18 (PC), II-7
329 JP 3-16 (FC), II-4
330 JP 3-16 (FC), II-5

331 JP 3-16 (FC), II-5
332 JP 3-16 (FC), II-6
333 JP 3-16 (FC), II-6
334 JP 3-16 (FC), II-7
335 JP 3-01 (FC), II-1
336 JP 3-01 (FC), II-4
337 JP 3-18 (PC), II-7
338 JP 3-01 (FC), II-4
339 JP 4-00.2 (FC), III-9
340 JP 3-16 (FC), II-8
341 JP 3-16 (FC), II-9
342 JP 3-16 (FC), II-10
343 JP 3-16 (FC), II-11
344 JP 3-16 (FC), II-12
345 JP 3-01 (FC), II-8
346 JP 2-0 (FC), III-10
347 JP 4-0 (PC), B-1
348 JP 3-07.6 (PC), III-1
349 JP 3-51, "Joint Doctrine for Electronic Warfare" (PC), II-3
350 JP 3-07.3 (FC), II-15
351 JP 3-07.6 (PC), III-2
352 JP 3-01 (FC), II-1
353 JP 3-11 (FD), D-12
354 JP 3-35 (PC), III-22
355 JP 5-00.1 (PC), IV-1
356 JP 3-35 (PC), III-4
357 JP 3-35 (PC), V-6
358 JP 2-0 (FC), II-7
359 JP 3-34, "Engineer Doctrine for Joint Operations" (SD), III-4
360 JP 3-51 (PC), III-9
361 JP 3-59, "JTTP for Meteorological and Oceanographic Operations" (FC), A-3
362 JP 3-59 (FC), B-2
363 JP 3-01 (FC), II-4
364 JP 3-55 (PC), II-2
365 JP 2-0 (FC), vi
366 JP 3-35 (PC), III-27
367 JP 4-0, "Doctrine for Logistic Support to Joint Operations" (PC), III-4
368 JP 3-01 (FC), II-8
369 JP 3-01 (FC), II-9
370 JP 3-35 (PC), V-7
371 JP 3-11 (FD), II-7
372 JP 3-16 (FC), I-1
373 JP 3-16 (FC) II-8
374 JP 3-16 (FC), II-11
375 JP 3-16 (FC), II-8
376 JP 3-16 (FC), II-11
377 JP 3-16 (FC), II-14
378 JP 2-0 (FC), A-2

-
- 379 JP 3-01 (FC), II-8
380 JP 3-07.6 (PC), III-4
381 JP 4-0 (PC), I-5
382 JP 3-07.6 (PC), II-14
383 JP 3-07.6 (PC), II-14
384 JP 3-16 (FC), II-15
385 JP 3-16, (FC), II-16
386 JP 3-07.3 (FC), I-17
387 JP 3-07.7, "JTTP for Domestic Support Operations" (PC), II-10
388 JP 3-07.7 (PC), II-11
389 JP 3-07.3 (FC), I-23
390 JP 3-07.3 (FC), II-15
391 JP 3-07.3 (FC), III-6
392 JP 3-07.6 (FC), II-13
393 JP 3-07.6 (FC), III-1
394 JP 3-07.6 (FC), III-1
395 JP 3-07.6 (FC), III-2
396 JP 3-07.6 (FC), III-6
397 JP 3-07.6 (FC), IV-9
398 JP 3-07.6 (FC), IV-16
399 JP 3-35 (PC), V-5
400 AFDD 1, "Air Force Basic Doctrine," 53
401 AFDD 1, 54
402 AFDD 2, "Organization and Employment of Aerospace Power," 31
403 NDP 6, "Naval Command and Control," ii
404 NDP 6, ii
405 FM 101-5, "Staff Organization and Operation," 1-1
406 FM 101-5, 1-1
407 FM 101-5, 1-1
408 FMFM1, "Warfighting", 62
409 MCDP 6, "Command and Control," 35
410 MCDP 6, 40
411 CJCSM 3122.03, "Joint Operation Planning and Execution System Volume II
Planning Formats and Guidance," C-56, A-5-2
412 CJCSM 3500.04A, "Universal Joint Task List," 2-121
413 CJCSM 3500.05, "Joint Task Force Headquarters Master Training Guide," 5-I-C-36
414 CJCSM 3500.05, 5-IV-139
415 CJCSM 3500.05, 5-IV-212
416 CJCSM 3500.05, 5-II-211
417 CJCSM 3500.05, 5-II-155
418 CJCSM 3141.01, "Procedures for Review of Operations Plans," A-72
419 JSI 8000.01, "Information Resources Management Program," GL-4
420 JSI 8000.01, 7, GL-4
421 JSI 8000.01, B-5, 6
422 CJCSI 6722.01, "Global Command and Control System Configuration Management
Policy," GL 16, 17

⁴²³ CJCSI 3151.01, "Global Command and Control System Common Operational Picture Requirement," A-10

⁴²⁴ CJCSI 6722.01, A-8

⁴²⁵ CJCSI 3151.01, GL-3

⁴²⁶ CJCSI 3151.01, GL-3,4



Developed by OC, Incorporated
for
USACOM Joint Warfighting Center