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COMMAND AND CONTROL OF JOINT AIRBORNE FORCES: DOCTRINAL DISCONNECTS

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the doctrinal disconnects which impact joint airborne operations, specifically those operations that might occur in the United States Central Command area of responsibility. This command area was chosen for study due to its visibility in current world events and its use of the Army's XVIII Airborne Corps, in which two of the study group's members previously served. The thesis of the study is that the lack of sufficient joint airborne doctrine impacts organizational, mission, and command and control aspects of joint airborne operations. These problem areas are sequentially examined, and recommendations are made to eliminate some of the doctrinal disconnects identified.

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USAWC MILITARY STUDIES PROGRAM PAPER

COMMAND AND CONTROL OF JOINT AIRBORNE FORCES:
DOCTRINAL DISCONNECTS

A GROUP STUDY PROJECT

by

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31 March 1989

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ABSTRACT

AUTHORS: Gene W. Cole, COL, AV; Vincent J. Santillo Jr, LTC, USAF;
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TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
CHAPTER I. INTRODUCTION.....	1
Background.....	2
Joint Airborne Operations.....	3
II. DOCTRINE.....	6
Current Doctrine.....	6
The Joint Publication System.....	7
Airborne Doctrine.....	8
III. ORGANIZATION.....	12
Intelligence.....	12
Logistics.....	15
IV. MISSION.....	19
Service Differences in Operational Fires.....	19
Tactical Air Fires.....	21
Ground Operational Fires.....	22
V. COMMAND AND CONTROL.....	24
Communications.....	24
Incompatibility of Hardware and Software.....	24
Satellite Communications.....	26
Joint Modernization.....	26
VI. CONCLUSIONS/RECOMMENDATIONS.....	28
Doctrine.....	28
Intelligence.....	29
Logistics.....	30
Operational Fires.....	31
Communications.....	32
Summary.....	32
BIBLIOGRAPHY.....	34
Figure 1.....	36
Figure 2.....	37

COMMAND AND CONTROL OF JOINT AIRBORNE FORCES: DOCTRINAL DISCONNECTS

CHAPTER I

INTRODUCTION

As former members of the XVIII Airborne Corps, two of the authors have been witness to various problems within the joint airborne community. Additional problems in this arena have been identified by current members of the XVIII Airborne Corps staff, while further problems were revealed and discussed in a recent "Blue Flag" command post exercise (CPX) which had joint participants reacting to a United States (US) Central Command (CENTCOM) scenario. This scenario will be referenced several times in the study, not only because of its use in this CPX, but because the scenario illustrates a probable type of future joint airborne operation. This type of joint airborne operation is not the "traditional" Army-Air Force one, but a more complex one involving concurrent Army airborne and Marine Corps amphibious operations. When these concurrent operations are conducted in close proximity in a joint theater, or as part of a Joint Task Force (JTF), they become a unique type of joint airborne operations.

This study will identify and examine four key problem areas associated with joint airborne operations, and will offer several recommendations for alleviating the problems discussed herein.

BACKGROUND

The last five or six years have seen an intensified focus on the ability of the US armed forces to operate jointly. Beginning with the "after action" reports and "lessons learned" from operation *Urgent Fury* in Grenada, through the Goldwater-Nichols Department of Defense (DOD) Reorganization Act of 1986, and into the President's unclassified *National Security Strategy* report of 1988, joint operations and Service interoperability have been major concerns of both US governmental and military communities.

One area of joint warfighting which has received recent focus is joint airborne operations. This focus was seen publicly in a statement by Marine Corps General George B. Crist, who recently retired as the Commander-in-Chief (CINC) of USCENTCOM. In his discussion of CENTCOM's revised strategy for defending Persian Gulf area oilfields against a Soviet or Iranian takeover, General Crist emphasized that smaller and "lighter" forces would be utilized, vice the "larger and more heavily armed forces" counted on in earlier plans.¹ With US forces committed to CENTCOM including both US Army airborne and Marine Corps amphibious forces, the requirement to conduct joint/concurrent airborne and amphibious operations in the CENTCOM area of responsibility (AOR) is distinctly possible; in fact, such operations and their associated joint operating procedures were tested during exercise *Blue Flag 89-1*, conducted at Hurlburt Air Force Base, Florida in February 1989. Without discussing specific classified operations plans (OPLANS) and joint procedures, the capability of US forces to conduct joint airborne operations is not without specific problems in terms of doctrine, organization, mission, and command and control (C²). Before

addressing these four specific problem areas of the study, Chapter I will continue with a description of basic joint airborne operations.

JOINT AIRBORNE OPERATIONS

Joint airborne operations involve two or more Services in the air movement and delivery of combat forces and their logistics support into an objective area to execute a tactical or strategic mission.² A joint airborne operation can be initiated by a unified or joint task force commander, with the Army force responsible for executing the ground tactical plan referred to as the "airborne force" and the Air Force elements responsible for the movement and delivery referred to as the "airlift force." The joint airborne operation begins and ends on the order of the joint force commander (JFC) who established the joint airborne force.

Planning for a joint airborne operation is very detailed, and close coordination is necessary among all participating units. This synchronization of effort continues through the mounting, air movement, assault, and follow-on operations phases until the JFC terminates the joint operation.³ The two key factors on which airborne operations are based are the ground tactical plan and the available airlift capabilities.

As soon as the airlift force delivers the airborne force to the area of operations, the ground forces can be employed as deterrent forces or combat forces. The mission may be to seize and hold objectives until ground linkup, reinforcement, or withdrawal can be accomplished. In order to conduct sustained combat operations, airborne forces (airborne, light, or air assault divisions) will have to be reinforced with appropriate combat, combat support, and combat service support (CSS) elements. Since most joint

airborne operations are expected to be "forced entry", support force structure and base complexes within the objective area can be expected to be limited.⁴ Air lines of communications (ALOCs) will be required initially to provide the immediate sustainment for the airborne force.

A joint airborne operation is best suited for short-notice, rapid deployment, contingency operations where a forced entry into a hostile environment is required. The missions assigned to the airborne forces may be tactical or strategic, and include:

- Seizing and holding important objectives.
- Denying key terrain or routes to the enemy.
- Delaying, weakening, and disrupting enemy forces.
- Providing a national show of force.
- Conducting a quick reaction movement to an overseas land area as a deterrent combat force.
- Constituting a strategic reserve.⁵

The joint airborne operation is usually terminated by the JFC after the airborne forces have been delivered and when:

1. The airborne force commander has secured the objective area, the main body of the airborne force with its equipment and supplies has been delivered to the objective area, and suitable drop zones, landing zones, or extraction zones are available for continuous resupply and evacuation by air.
2. Linkup with surface forces has occurred.

3. Preplanned or emergency withdrawal of the force has occurred.⁶

The airborne force may now be redeployed to its original base, to an intermediate staging base, or to another theater of operations to be reconstituted for other missions.

With this basic discussion of airborne operations complete, the study next examines the first and most far-reaching problem area in joint airborne operations--that of joint airborne doctrine.

ENDNOTES

1. Richard Halloran, "U.S. Altering Strategy for Defense of Arabian Oilfields," Special to the New York Times, 4 December 1988, p. 32.

2. U. S. Department of the Army and Air Force, Field Manual 100-27/Air Force Manual 2-50, p. 1.

3. IBID., p. 17.

4. Commander, XVIII Airborne Corps, "Warfighting Philosophy" letter, 11 January 1987.

5. U.S. Joint Chiefs of Staff, JCS Publication 5-00.2, Test Pub, p. 1-1.

6. U. S. Department of the Army and Air Force, p. 5.

CHAPTER II

DOCTRINE

Prior to examining this study's first problem area, that of specific joint airborne doctrine, the following definitions are offered as foundation:

doctrine--Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application.

joint doctrine--Fundamental principles that guide the employment of forces of two or more Services of the same nation in coordinated action toward a common objective. It is ratified by all four Services and may be promulgated by the Joint Chiefs of Staff.

multi-Service doctrine--Fundamental principles that guide the employment of forces of two or three Services of the same nation in coordinated action toward a common objective. It is ratified by two or three Services, and is normally promulgated in joint Service publications that identify the participating Services, e.g. Army-Navy doctrine.¹

CURRENT DOCTRINE

In order to efficiently and effectively conduct joint operations, joint doctrine must be available. This doctrine must be understood by all

Services concerned, not only in terms of unique Service responsibilities and procedures, but more importantly in terms of developing the overall joint capability to make joint operations successful. This doctrine must be specific enough to allow each Service to understand the particular roles of the other Services, yet be flexible enough to allow continuous refinement of that doctrine. Ultimately, and in order to be truly joint, the doctrine must be subscribed to by all of the Services which may be needed to conduct operations in a particular mission area.

THE JOINT PUBLICATION SYSTEM

Formalized doctrine for the US armed forces today begins with Joint Chiefs of Staff (JCS) Publication (Pub) 1-01, "Joint Publication System." JCS Pub 1-01 describes Joint Doctrine, the "Joint Tactics, Techniques, and Procedures Development Program," and the publication organizational framework and hierarchy of the Joint Publication System.² This publication system is implemented by the Joint Doctrine Master Plan and is managed by the Director, JCS J-7. This master plan seeks to:

1. identify voids in joint doctrine, and initiate joint doctrine projects;
2. transfer joint doctrine publications previously approved by the four services under the new Joint Publication System;
3. link doctrine to specific procedures.³

The Joint Publication System is currently undergoing massive revision (Figure 1). Ultimately, this system will have as its top level of

publications the "O" series, or "Capstone" manuals. These will be in the form of Pub 0-1, "Basic National Defense Doctrine," currently in development, and Pub 0-2, which will replace the current JCS Pub 2, Unified Actions Armed Forces (UNAAF). Pub 0-1 will link national strategy with joint doctrine, while Pub 0-2 will continue to "set forth principles and doctrines to govern the joint activities and performance of the armed forces of the United States." ⁴

Next in the publication hierarchy are the "1" Series Pubs, which are Joint Reference Publications, followed by the "2" through "6" Functional Series, each with its own hierarchical "Keystone" Publication. As seen in Figure 2, many of these described publications are currently "to be developed," a situation which will be referenced further in exploring problem areas identified in this study. When finally approved by the Chairman of the JCS (CJCS), these designated "Joint Publications" will guide services in developing their own doctrine. Pubs that are not reviewed and approved by the CJCS, even though they have been approved by more than one Service, will be called "multi-Service" Pubs.⁵

AIRBORNE DOCTRINE

The evolution of airborne doctrine begins in JCS Pub 0-2 (UNAAF), which not only specifies roles, missions, and responsibilities for all the separate Services, but also specifies Service responsibilities in joint operations. Listed as a primary function of the Army is developing:

... in coordination with the other Military Services, the doctrines, procedures, and equipment employed by the Army and Marine Corps forces in airborne operations.

The Army will have primary responsibility for developing those airborne doctrines, procedures, and equipment that are of common interest to the Army and the Marine Corps.⁶

For the Marine Corps, UNAAF lists the function to "Train and equip, as required, forces for airborne operations, in coordination with the other Military Services, and in accordance with joint doctrines." ⁷ Further, the Marine Corps is charged to:

Develop, in coordination with the other Military Services, doctrines, procedures, and equipment of interest to the Marine Corps for airborne operations and not provided for by the Army, which has primary responsibility for the development of airborne doctrines, procedures, and techniques, which are of common interest to the Army and Marine Corps.⁸

In comparing the wording of UNAAF's direction to the Army in developing airborne doctrine, with its wording to the Marine Corps in developing similar doctrine, the potential for a disconnect is immediately apparent. While the Army maintains primary responsibility for developing airborne doctrine of common interest to the Army and Marine Corps, the Marine Corps can develop its own airborne doctrine not provided for by the Army. The door is therefore open to the Marine Corps to develop its own unique airborne doctrine simply by stating that any "joint" airborne doctrine developed by the Army is insufficient for Marine Corps needs. In fact, such a situation currently exists; the Army and Air Force have developed Field Manual 100-27/Air Force Manual 2-50, "USA/USAF Doctrine For Joint Airborne And Tactical Airlift Operations."⁹ This manual contains doctrine, responsibilities, and procedures for Army and Air Force planning,

coordinating, and executing of joint airborne operations. In examining the development and approval of this manual, Marine Corps participation is non-existent; additionally, discussions with some of those Service members responsible for developing and updating this manual reveal that Marine Corps participation has been requested but has continued to be denied by the Corps. While it should be noted that FM 100-27/AFM 2-50 is not the only Pub dealing with airborne doctrine, it is currently the closest document to a joint airborne operations doctrinal publication which exists.

One doctrinal publication needed is one devoted to coordinated, concurrent operations undertaken by the separate Services of a joint force: specifically an Army airborne operation concurrent with a Marine amphibious operation, as is likely to occur in the CENTCOM scenario referred to previously. This scenario is further referenced in this study partly due to the study group's observance of these types of operations in *Blue Flag 89-1*, but predominantly due to the fact that this scenario of concurrent airborne and amphibious operations has a realistic prospect of being conducted sometime in the future, given the possible areas of US future operations. As stated in the Introduction such "concurrent" operations, when conducted in a joint area of operations (AO), will by their very nature be joint operations; without specific doctrine describing how these operations will interface, the "coordinated action" which joint doctrine should provide will in all likelihood be non-existent.

Finally, it should be noted that although this chapter discusses the lack of foundational joint airborne doctrine, each of the remaining three problem areas of the study will describe additional doctrinal disconnects as related to organization, mission, and C² in joint airborne operations.

ENDNOTES

1. U.S. Joint Chiefs of Staff, JCS Publication 1, pp. 118, 200, 242.
2. U.S. Joint Chiefs of Staff, JCS Publication 1-01, p. i.
3. U.S. Armed Forces Staff College, AFSC Publication 1, p. 86 (hereafter referred to as "AFSC Pub 1").
4. U.S. Joint Chiefs of Staff, JCS Publication 2, p. i (hereafter referred to as "JCS Pub 2").
5. AFSC Pub 1, p. 87.
6. JCS Pub 2, p. 2-4.
7. IBID., p. 2-8.
8. IBID.
9. U.S. Department of the Army and Air Force, Field Manual 100-27/Air Force Manual 2-50.

CHAPTER III

ORGANIZATION

While the doctrinal disconnects previously described represent very basic shortcomings in joint airborne operations, organizational disconnects are more complex. These disconnects, as identified in this second problem area of the study, are the result of natural uni-Service organizational development, and manifest themselves during joint exercises or operations. In studying joint airborne operations, this study group identified major organizational disconnects in the intelligence and logistics structures which support joint airborne operations.

INTELLIGENCE

In recent years, numerous articles have appeared in Army publications describing how operational intelligence is to be produced and subsequently provided to theater commanders, but little has been done to bring these concepts together across Service lines. Concurrently, there has been an intelligence system modernization program ongoing in all the Services which has significantly expanded the intelligence gathering capability at all three levels of warfare: strategic, operational, and tactical. While the expansion of ideas on intelligence preparation of the battlefield (IPB) has accompanied systems modernization, both joint doctrine and the force design of intelligence support at the operational level of warfare have lagged. Each of the Services has an intelligence structure with the necessary components to acquire, analyze, and distribute required intelligence data; however, there is no joint doctrine which blends these

structures together with inputs from strategic intelligence systems. The Defense Intelligence Agency (DIA) has been tasked by the JCS to write the Intelligence Keystone Publication 2-0, with a draft of this pub scheduled to be produced by the summer of 1989. However, with the current lack of a Keystone Pub for strategic guidance, a deployed intelligence staff must look for its own ways to best address two major disconnects: the lack of doctrine and associated procedures for intelligence flow to an airborne force, and the lack of sufficient intelligence manpower to support this effort at the various levels of command. Essentially, no organization exists to blend together the intelligence coming from the tactical forces with that of the strategic systems, and then to ensure that the appropriate information is provided to all levels of command.

In the CENTCOM scenario of airborne and amphibious operations, the Commander of the Amphibious Task Force (CATF) most probably becomes the link that connects the operational and tactical intelligence missions of Army and Marine forces together within the theater AO. This operational intelligence concerns the collection, identification, location, and analysis of strategic and operational centers of gravity,¹ with tactical intelligence being intelligence on the enemy, weather, and terrain normally associated with friendly units from battalion to corps. In conducting these required operational level intelligence tasks, the CATF simply does not have sufficient manpower in the Joint Intelligence Center (JIC).² The current Navy JIC design was made to support Marine forces ashore for limited periods of time, and not to support Marine Corps and Army airborne forces for any prolonged operations. More importantly, the JIC was not designed to receive the intelligence disciplines (SIGINT, IMINT, HUMINT) from both the strategic and tactical levels simultaneously. Added to this lack of

sufficient manpower to perform critical intelligence tasks is the severe lack of comprehensive, doctrinally-based procedures for JIC operations.

Today, generally-accepted intelligence practices consist of units producing intelligence on their own area of responsibility, and relying on higher or adjacent units for intelligence on the remainder of their area of interest. For this to occur in the CENTCOM airborne/amphibious scenario, the JIC must satisfy all intelligence requirements of the airborne force, to include support to Air Force assets involved in the operation. Data provided by the JIC could include details on drop zones, enemy reinforcement capabilities, and the air defense threat enroute to the objective area. Additionally, the JIC must also satisfy the intelligence requirements of the Marine Expeditionary Force (MEF) beyond the capabilities of its own intelligence staff. Information provided to the Marines could include data on enemy ground and air threat to the lodgement area, and the positions of enemy reinforcements or follow-on echelons. Unfortunately, without a sufficiently manned JIC using doctrinally-based procedures for completing all these varied actions, confusion will be highly likely.

In summary, joint airborne forces require detailed information from all intelligence disciplines prior to entering the objective area. Once in this area, these forces must continue to receive timely, complete intelligence information due to the airborne force's lack of mobility and its vulnerability to armored forces. Currently, the lack of effective doctrine, the resultant operating procedures, and most importantly, the associated joint intelligence organization make this critical intelligence support questionable.

LOGISTICS

The bulk of the JCS Pubs for logistics have yet to be developed and approved (Figure 2); unfortunately some of the more important of these Pubs are in this category. There are current OPLANs that call for a significant use of logistical assets for support, but until some of the required joint Pubs are approved, executing these OPLANs may be highly difficult. Additionally, once planning begins for a joint airborne operation, all supporting logistical efforts become complicated simply due to the nature of airborne operations themselves.

The first key area to be addressed in planning for an airborne operation is the general area of port operations. These are operations that begin at home station, continue to the Initial Staging Base (ISB) and eventually end at the airhead. Included as part of this effort is the rigging of all the deploying equipment, a massive task not only for the Army airborne unit that will rig the equipment, but also for the Air Force elements that will load, transport, and deliver the rigged equipment to its final destination. It should be noted that the length of any warning prior to a planned operation will dictate the amount of pre-rigging which can be done. And as long as the rigging and load-out occur at a single location, equipment such as K-loaders, cranes, rollers, fork lifts, and tractor/trailers can generally be made available in sufficient quantities to support the rigging effort. However, if men and equipment are moved to several different areas of debarkation, assembling this assorted equipment becomes extremely difficult to coordinate, and excessive time is spent relocating equipment to the proper location(s).

During a joint airborne operation, the US Transportation Command (USTRANSCOM) has the requirement to provide airlift forces, environmental services, and necessary administrative, communications, and logistical support for the airborne forces moving through Military Airlift Command (MAC) bases. This is the first time that potential competition for limited transportation resources can occur and, in a fast-paced operation, it may be difficult for TRANSCOM to determine the right priorities.

Support provisions must also be made at each location to ensure maximum efficiency in the transfer of airborne equipment and personnel. Once out of the US, security must be provided, ranging from prevention of pilferage to theater security from hostile forces. As this security effort expands, daily requirements for food, water, etc. continue to increase for the associated security personnel, putting a further drain on potentially scarce resources.

Once the operation is well under way, the requirement to provide enroute fuel for inter-theater airlift appears; this is done by location, in 10-day increments for the supporting CINCs. Eventually, intra-theater fuel requirements for airlift also consume scarce resources, and the overall coordination effort becomes a Herculean task.

Another big logistical area of concern will be the coordination of fuel requirements. While there will only be a small number of ground vehicles at the airhead, the large number of aviation assets will have considerable fuel requirements. Aviation fuel for divisional helicopters (based on five hours of flight per day/helicopter) could require in excess of 50,000 gallons per day. The anticipation, integration, continuity, and responsiveness of aviation fuel management will be difficult, and any under-estimates could prove disastrous, since flying operations that are unsupported leave aircraft

vulnerable to enemy attack. And while provisions have been made for acquiring aviation fuel from commercial sources, this fuel must be moved from current storage locations to operational sites. Host nation support will be required for augmentation in this effort, and while this support has been planned for, it has not been contracted for. Overall, the right fuel in the right amounts, at the appropriate times, is essential.

Currently, an additional problem in fuel compatibility exists; Army helicopters landing on Navy ships for refueling, medical evacuation, C², etc. will only have Navy JP-5 available. This fuel difference, from the Army's normal use of JP-4, can be a problem if JP-5 is not available for Army helicopter use prior to shipboard operations (current Service requirements dictate AH-64s and UH-60s "acclimate" with one fuel load of JP-5 prior to shipboard operations), and also if flight at high density altitudes is expected. While divisional UH-60s and AH-64s can operate across the flight envelope with JP-5, the OH-58 (Kiowa) and AH-1 (Cobra) engines' operating temperatures become too hot at higher altitudes when using JP-5. The additional storage problem for JP-4 arises if Kiowa and Cobra operations are required.

It is easy to see how complicated logistics can become in a joint airborne operation, and with the diversity of problems just discussed, numerous organizations must effectively interface if supportable and successful airborne operations are to result. Hindering the probability of the various logistical entities to effectively interface, however, is the lack of a centralized US Army organization or organizational element dedicated to overseeing logistical support to airborne forces. The CSS responsibility for an operation of this nature now rests with Echelons above Corps (EAC). Currently, US Army support structure is not organized to focus on the

airborne force (e.g. 82nd Airborne Division) and supporting Corps troop requirements. While the EAC Provisional Support Group (PSG) does embody some of the elements of the multifunctional support group concept, the EAC PSG is considered awkward since the headquarters is an *ad hoc* organization with no clear command authority over subordinate organizations and units. The command and control unit of the Corps Support Group (CSG) has no mission to support airborne forces, although it has a habitual, well-established support relationship for day-to-day operations. Additionally, once established in the AO, this unit will be required to provide CSS general support (GS) to Marine units, as well as the Army airborne forces. Currently there are insufficient subordinate airborne resources available to supplement the CSG headquarters.

ENDNOTES

1. Larry Y. Buel, Capt, "Intelligence Preparation of the Battlefield," Military Review, 10 October 1987.
2. Joint Service coordination conference, "Exercise Blue Flag 89-1", Hurlburt Air Force Base, Florida, 16 January 1989.

CHAPTER IV

MISSION

If organizational disconnects in joint airborne operations are eventually solved, mission-related disconnects will still exist. This third problem area of the study concerns a very critical part of these mission disconnects, that of operational fires used to support various phases of an airborne operation. In a joint operation, these fires can be delivered from air, land, or sea, and by all of the separate Services; when elements of the US Army 82nd Airborne Division are under the operational control of the US Navy and a Marine Expeditionary Force (MEF) during joint operations, these disconnects could have a profound effect on the planning, coordinating, and executing of operational fires at the operational level of war. This chapter will show that in terms of mission aspects of support to airborne forces, the application of operational fires requires careful review and study, particularly when addressing the aforementioned CENTCOM scenario.

SERVICE DIFFERENCES IN OPERATIONAL FIRES

Operational fires cover the spectrum of counter-air, air interdiction, close air support, naval gun fire, naval long-range weapons systems (e.g. Tomahawk), and Army and Marine Corps short and long-range artillery systems. These operational fires will be planned, coordinated, and executed in a combat theater of operations by a joint staff; unfortunately, there is an overall lack of extensive experience in these types of joint operations. More particularly, there is a lack of institutional knowledge concerning Army airborne forces operating under the control of Navy and Marine forces. The

challenge to the joint staffs, therefore, is in finding ways to correct significant deficiencies before a real-world campaign begins.

Historically, US Services have focused more on single service or two service operations, rather than on all four Services working together. As previously explained, it has just been in the current decade that jointness in planning, coordinating and executing combat operations has become a more common endeavor. One of the major hindrances to this jointness has been the entrenched Service philosophies. The Navy and Marine Corps have their "Maritime Strategy", while the Army and (to a lesser degree) the Air Force are committed to the "Airland Battle" concept. While these philosophies are distinctly different, they must be brought together at the operational level of warfare. The key point is that these schools of thought have promoted the idea that the Services can operate more or less independently of each other, i.e. the Navy operates with the Marine Corps, and the Army with the Air Force. There are many historical examples demonstrating how Service philosophies have affected the successful execution of operational fires, and independence among the Services can be seen in operations in World War II, Korea, and Vietnam.

Aside from Service philosophies, however, differences in Service operating procedures account for even more disconnects in the application of operational fires. Most recently, operation *Urgent Fury* in Grenada served to highlight inter-service problems in conducting operational fires,¹ where a cause of poor performance was a lack of Service interoperability in joint warfighting.

One needs only look at the various operational possibilities in employing airpower to appreciate the scope of disconnects existing in operational fires. The US Navy operates with its own tactical air capability and

weapons systems to protect its fleets and provide operational fires to land forces ashore.² Likewise, the Marine Corps has its organic aircraft and weapons systems for supporting its forces ashore. Finally, the US Air Force is organized, trained, and equipped to provide air support to all ground forces.³

Thus exists the challenge for a joint staff to coordinate the various weapons systems of the Services to achieve effective operational fires. And not to be excluded, the Army has developed over the years considerable capability for operational fires outside of its traditional artillery capability; Multiple Launch Rocket System (MLRS), attack helicopters, and tactical missile systems all must be integrated into the overall joint scheme of operational fires. With all these various systems available, the 82nd Airborne Division Commander (e.g.) must determine not only which of the organic Army systems will provide required fire support, but also if other Services with their own unique systems will provide fire support. Additionally, the 82nd Commander must determine what inputs the Army will have in planning the support, and more importantly, what doctrinal concepts will be used in providing this fire support. An absence of four-Service (i.e. joint) operational fires doctrine hinders this decision process.

TACTICAL AIR FIRES

Another disconnect in the mission aspect of operational fires concerns the command and control of certain tactical air operations. The JCS first approved in 1981 the Omnibus Agreement in which the Marine Corps tactical air remains under the control of the Marine Air Ground Task Force (MAGTF).⁴ Additionally, JCS Pub 26 has since institutionalized the MAGTF Commander

as retaining "operational control of his organic air assets" during sustained operations ashore.⁵ Although the Omnibus Agreement and JCS Pub 26 appear to conflict with Air Force Basic Doctrine, which holds that all theater air assets should be under the control of a theater air component commander (ACC) who employs airpower as an interdependent force with land and naval components, this potentially contentious doctrinal issue has apparently been resolved. The true effects of these joint doctrinal efforts, however, will only be demonstrated by the success of tactical air coordination in future battle. A further sidelight to the doctrinal-mission issue concerns close air support operations. The Marine Corps and Navy have not worked as much in this role with the Army as has the Air Force; an ACC must therefore have an appreciation for close air support from a multi-service operational and doctrinal perspective, something the single or dual services' perspectives do not easily allow.

GROUND OPERATIONAL FIRES

In applying ground operational fires with weapons systems of all the Services, the situation is no more clearer than in applying air-delivered fires. Underlying reasons for this confusion include both institutional and procedural aspects of the Services. Institutionally, the Navy and Marine Corps have organized supporting arms units to coordinate and deliver both air and ground operational fires; likewise, the Army and Air Force have done the same with theirs, resulting in two generally different environments. The challenge is in fitting together the classic Army and Air Force fire support control mechanisms, with the supporting arms C² system of the Navy and Marine Corps.

ENDNOTES

1. United States Army Training and Doctrine Command, Combined Arms Center, Operation Urgent Fury, After Action Report, p. III-22.
2. U.S. Department of the Navy, NWP 1 (Rev. A), p. 1-4-1.
3. U.S. Department of the Air Force, AFM 1-1, pp. 1-3, 1-4.
4. Chairman, JCS, Joint Doctrine for Theater Counterair Operations, 4 March 1986; U.S. Department of the Navy, White Letter No. 4-86, 18 March 1986.
5. U.S. Joint Chiefs of Staff, JCS Publication 26, p. III-4.

CHAPTER V

COMMAND AND CONTROL

While command and control disconnects have already been revealed in terms of the doctrine, organization, and mission problem areas, this final problem area of the study will focus on command and control in terms of anticipated communications problems in joint airborne operations.

COMMUNICATIONS

Communications during recent joint airborne exercises have demonstrated problems not only with doctrine, but also with incompatible software and hardware, with satellite communications nets, and with the lack of a joint modernization program. These three problems are addressed below.

Incompatibility of Software and Hardware

One frustrating software incompatibility that produces a negative impact at the operational level is the lack of joint Communications-Electronics Operating Instructions (CEOIs); with neither joint doctrine nor joint procedures to address this issue, problems abound. Currently, there is Marine Corps resistance to releasing more than the portion of the CEOIs and key lists that apply directly to a particular sub-unit. This makes it impossible for certain support units (e.g. aviation units) to have the flexibility to communicate with all other units involved in an operation. Although a standardized joint contingency COEI is unavailable to solve this problem, during a recent *Ocean Venture* exercise such a joint COEI was

successfully developed and disseminated to the lowest unit levels. Informal discussions reveal that this action has been most successful when exercised in Atlantic Command.¹

One hardware incompatibility is revealed in the inability to communicate from an Army airborne force to a Marine and Navy command. This situation can result in obvious problems for the airborne force, with uncoordinated operational fires being one of the most critical. Another incompatibility is seen in the Army Drop Zone (DZ) Control Party communications hardware, where Army "Pathfinders" do not have the ability to communicate with Air Force aircraft. Although Air Force Combat Control Teams are generally used to control a DZ and communicate with the airlift force, the loss or absence of these teams in combat would require the Army Pathfinders to control the DZ without direct communications with the delivery aircraft. Further, none of the Services is properly resourced with the requisite radios to enter the required joint nets while still maintaining communications with their Service-unique nets (e.g. Army authorization documents do not provide for the procurement of additional radios for use in joint nets), and this shortfall in equipment is most noticeable during transition periods when command is shifting from one headquarters to another. While creating transition nets helps soften this problem, these nets can become overcrowded, making effective communication extremely difficult. Also, to ensure coordination and prevent duplication, commanders must establish clear responsibilities for functions. The problems of liaison, language, and equipment incompatibility present in joint operations must be resolved at all levels.² Compatibility differences in terms of hardware and software continues to be a problem area, and these differences are only worked out now with extensive planning prior to

exercises. Unfortunately, such time will not be available prior to real-world, short-notice contingency operations.

Satellite Communications

All of the Services realize how critical satellite communications (SATCOM) nets will be in any joint operation. The decision must be made early to ensure that all essential commanders are on the proper nets and everyone must understand who controls those nets. During the air movement phase of an airborne operation, it will be desirable that as many aircraft as possible be equipped with SATCOM antennas for Army use, so that ground commanders cross-loaded throughout the flight can receive current situation reports right up to the parachute assault. These JCS-controlled, hatch-mounted antennas become very critical equipment items at these key times, and XVIII Airborne Corps (e.g.) ensures their availability by obtaining several antennas for Army use during this important phase of the operation. This allows the Air Force to use their aircraft satellite antennas as they see fit, e.g. in a "flight following" net to MAC airlift control centers.

Joint Modernization

The lack of a joint modernization program has resulted first in a multi-channel communications system that does not net with the Marine Corps--the Marines did not buy the mobile subscriber system that the other Services did. The Army and the Marine Corps are, however, fielding the same high frequency (HF) radio as well as the same communications security package, and some C² activities should be easier when this fielding is complete. Finally, for ground elements employing Air Force assets, a

Tactical Air Control Party (TACP) must be present to interface with USAF-peculiar radios, since many fighter aircraft (notably the predominant F-16) do not have FM radios. Increased emphasis on a compatible joint communications modernization program is essential.

ENDNOTES

1. Joint Service coordination conference, "Exercise Blue Flag 89-1", Hurlburt Air Force Base, Florida, 16 January 1989.
2. U.S. Department of the Army, FM 100-5, p. 168.

CHAPTER VI

CONCLUSIONS/RECOMMENDATIONS

After concluding the research for this study, including observing a major joint CPX, and based on a continuing dialog with members of the airborne community, the conclusion reached is that a real need exists for more specific joint airborne command and control doctrine. Doctrine is the foundation on which operational concepts, tactics, and procedures are based, and the lack of sufficient joint airborne doctrine seriously impacts the command and control of a joint airborne force. As an important strategic land force that can operate at all levels of warfare, and under the command and control of other Services in joint operations, the airborne force is an ideal component of the military element of national power. This study has revealed shortcomings in the ability of such a force to be used effectively, and the lack of sufficient doctrine is the root cause of this situation. In order to help correct these doctrinal and other noted deficiencies, this concluding chapter offers several recommendations.

DOCTRINE

Very basic joint airborne doctrine is not only unavailable, but it is also not listed as a joint publication scheduled to be developed (Figure 2); as a result, this study's first recommendation is that joint airborne doctrine be developed. Specific inputs for joint airborne doctrine will not be offered, however, as these inputs are well beyond the scope of this study, and are

best reserved for those actually writing the joint doctrine. The major doctrinal recommendation is simply that joint airborne doctrine be written, approved, and promulgated for use in future exercises and operations, using FM 100-27/AFM 2-50 as its basis. This obviously requires Navy, and more predominantly Marine Corps participation. Informal conversations with personnel involved reveal that FM 100-27/AFM 2-50 is scheduled for revision in the near future, and this revision presents the ideal opportunity to develop the joint airborne doctrinal publication needed. Since CENTCOM currently has a great need for this type of doctrine, a further recommendation is that this staff be involved as much as possible in providing inputs to this revision. This CENTCOM action is logical from several perspectives: first, CENTCOM's potential for conducting the joint airborne operations described make this command a logical starting point for inputs to these joint doctrine efforts; second, this year's *Blue Flag 89-1* exercise has given the CENTCOM staff recent experience in planning and conducting these types of operations; finally, CENTCOM's force structure, specifically its Army and Marine forces, makes the staffing and coordinating of inputs to joint airborne doctrine easier to accomplish, when compared to these same actions being done by the staff of a single Service.

INTELLIGENCE

Joint intelligence doctrine and procedures must be written as a sub-manual of DIA's Keystone manual. This doctrine is critically needed to clear up the responsibilities of what each staff level should do in the collection, analysis, production, and dissemination of intelligence in a joint

environment, particularly relating to the complex intelligence tasks of the JIC/MEF staffs. Since CENTCOM has a major operational need to employ airborne forces as part of a JTF, they again appear to be the logical unit to provide inputs to this doctrine. Once the doctrine is written, it should be field tested and institutionalized by joint training.

Finally, since a large, trained JIC/MEF staff will be needed to perform intelligence tasks, manpower augmentation will be required from the XVIII Airborne Corps (and higher) intelligence staffs.

LOGISTICS

Echelons above Corps still have the responsibility to provide Combat Service Support for the airborne force. To facilitate this function, the EAC CSS elements should be split according to their support missions. The CSS elements assigned to support the airborne force should be assigned to a forward-deployed multifunctional support group. This action results in more responsive support, and greatly simplifies lines of communication, liaison, and work loading for the supported units. The remainder of the CSS elements can remain in a rear area to provide routine General Support missions. Functional, traditional support structure can be used if this forward support group condition is met, and the EAC Provisional Support Group can still command its designated units which operate ports and provide non-divisional area support.

OPERATIONAL FIRES

As stated in Chapter IV, the most significant challenge lies in the framework of blending the Army and Air Force fire control mechanisms and delivery systems with the Navy and Marine Corps structure prior to passage of command ashore and on the shore. The recommendation for accomplishing this action follows:

a. The Navy Supporting Arms Coordination Center (SACC) will be the final coordinating/controlling authority for all supporting arms until the passage of control ashore. Once ashore, the Marine Expeditionary Force Fire Support Coordination Center (FSCC) will be the final authority.

b. Naval Gun Fire Ship (NGFS) assignments will be made by the SACC. NGFS will be assigned either in direct support of a maneuver unit or in general support under the control of a higher headquarters. The unit to which the ship is assigned will be responsible for controlling the fires of that ship. SACC retains control of the ship with respect to assignment of operating areas.

c. Fires and movement of artillery will be planned and controlled by the element to which the artillery is assigned. The FSCC will keep the SACC informed of artillery unit locations and status (firing or non-firing); all cross-boundary fires will be coordinated between adjacent units, keeping SACC informed.

d. The Army will augment the Marine FSCC with a mini-battlefield coordination element (BCE) to clear fires through the Airborne Division's Fire Support Element (FSE). Additionally, the Army will provide liaison officers to the Navy SACC afloat. Also, Navy Gunfire Liaison (ANGLICO)

elements will be located at the FSCC and the Division FSE to clear Navy gun fire and long-range missiles (SLCM/Tomahawks) into and across service boundaries.

While experience in past conflicts has pointed to Service philosophies and procedures as a major stumbling block in conducting operational fires, newly developed joint tactics, techniques, and procedures can offer some cure for these past ills. The important task at hand is for the Services concerned to develop for JCS approval the appropriate joint doctrine needed, and then, more importantly, to exercise and refine joint procedures and doctrine as necessary, to allow joint operations to proceed logically and effectively.

COMMUNICATIONS

Communications support for the command and control of a joint airborne force will always be a challenge. All of the Services must continue to seek complete compatibility in equipment, and increase the opportunities to robustly exercise all of the systems at all levels. By accelerating programs for compatible state-of-the-art equipment, command and control of joint forces will be much less complicated.

SUMMARY

The recommendations above are not considered to be drastic by the members of this study group, but are considered to be workable solutions to the problems presented. The major stumbling block in implementing

workable solutions to all the listed problems is in getting the foundational joint airborne doctrine written and approved for use. When this major task is completed, many of the problems listed herein will be more easily solved, and future joint airborne operations will have a better chance of success.

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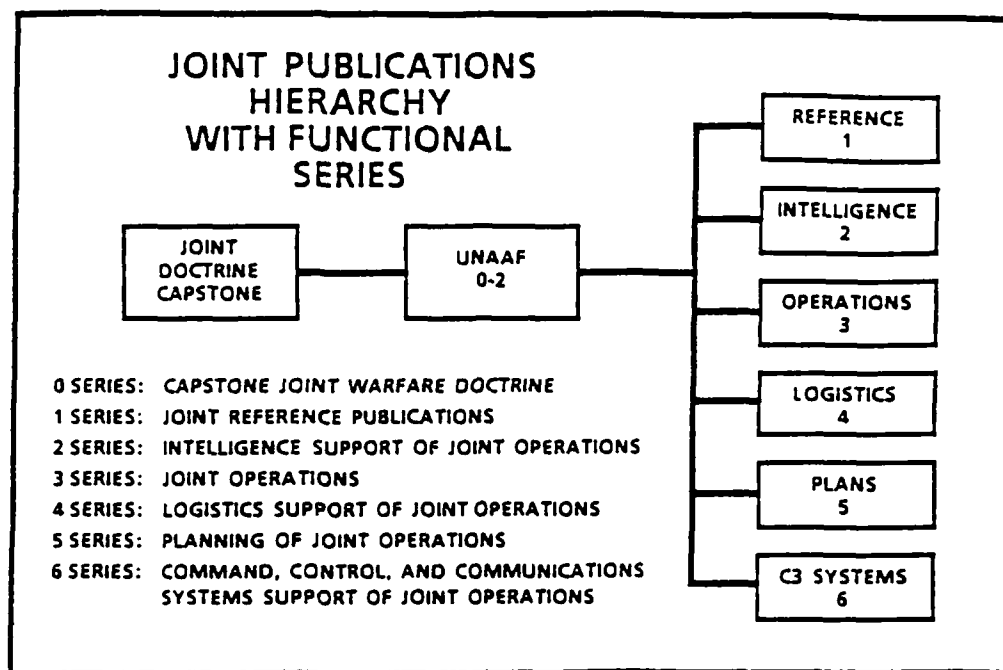
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Figure 1 (AFSC Pub 1, pp.87,88)

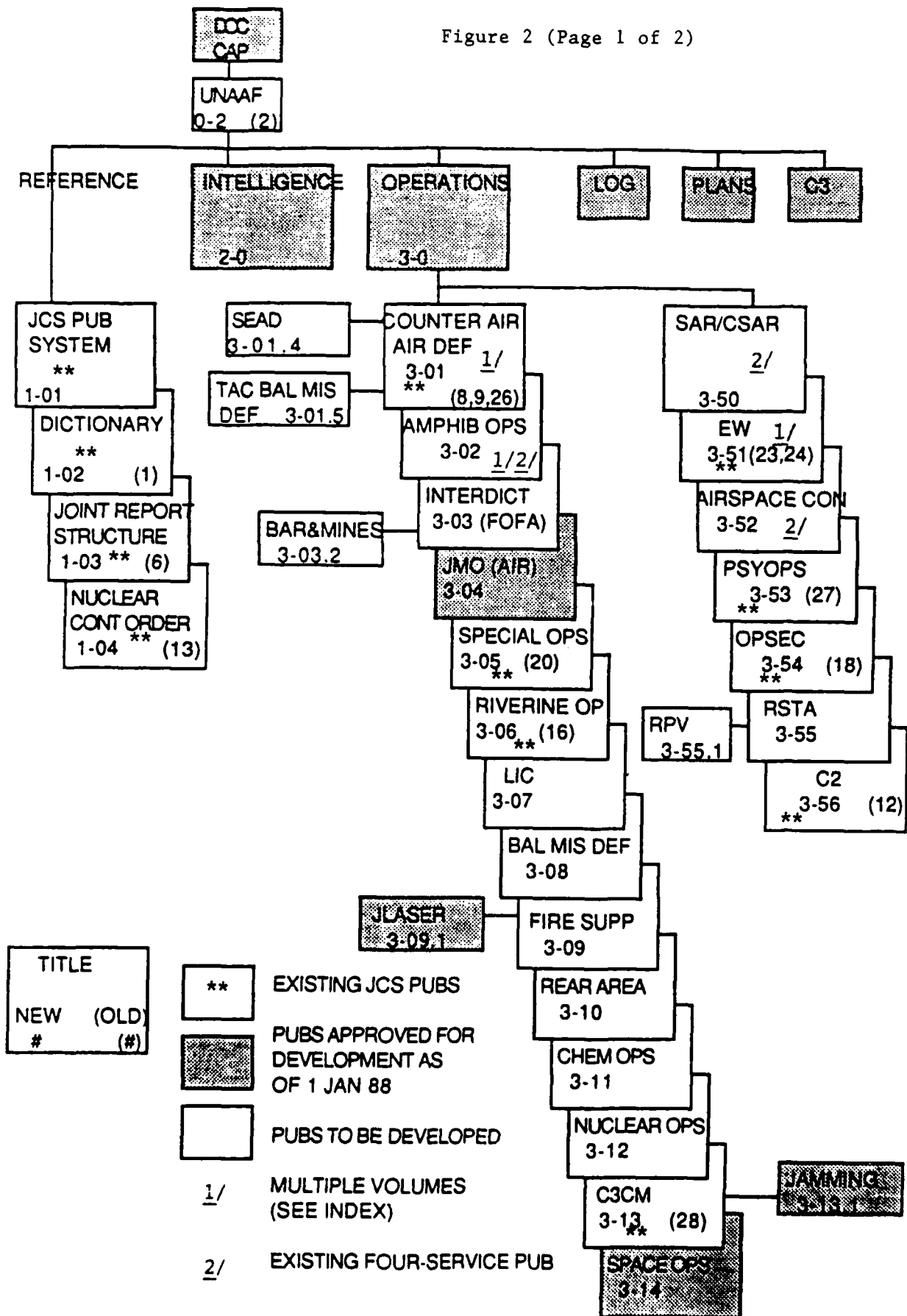


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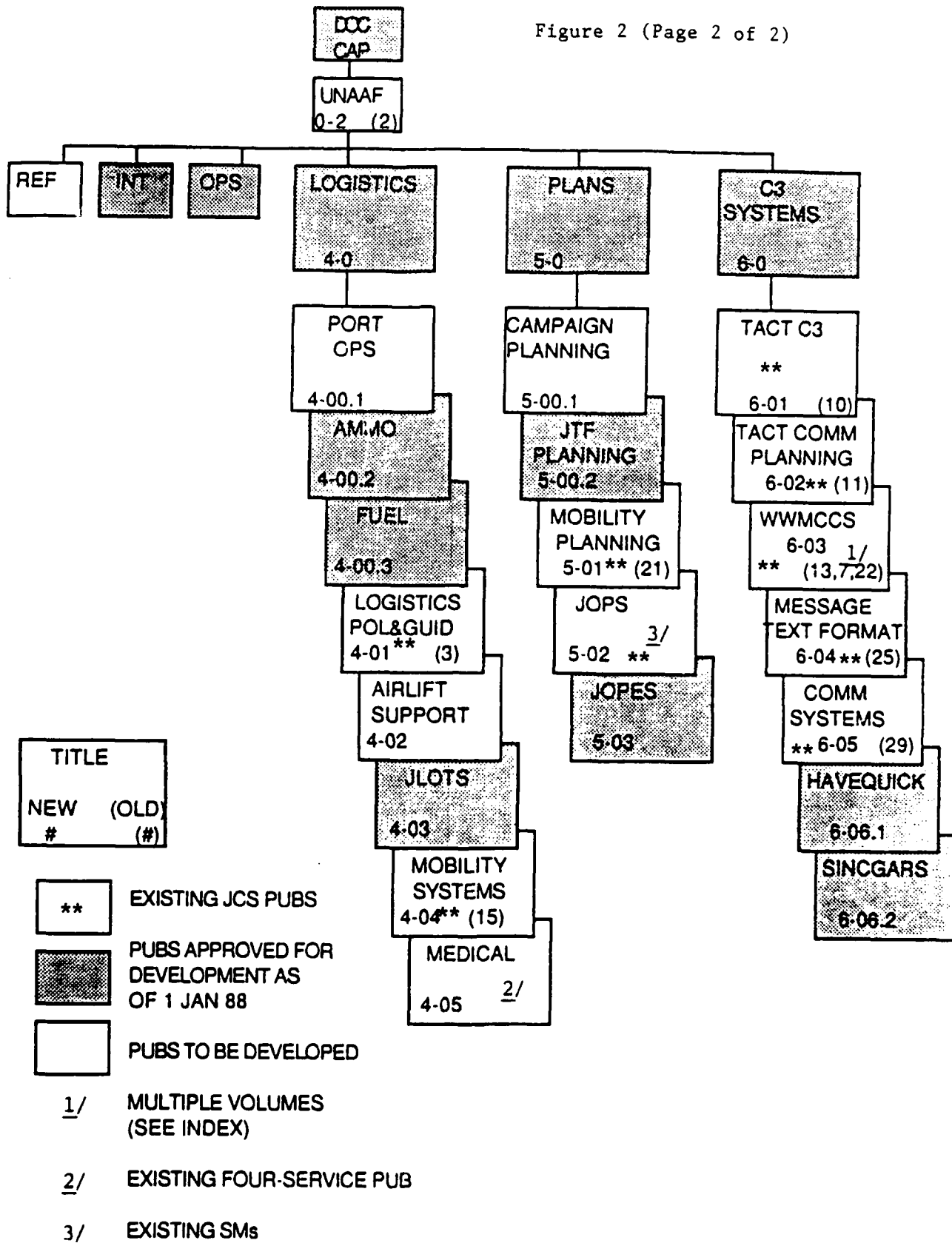
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PUB 24	JCS Pub 3-51.1
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Figure 2 (Page 1 of 2)



(From JCS Pub 1-01, 15 APRIL 1988)



(From JCS Pub 1-01, 15 APRIL 1988)