This publication has been prepared under our direction for use by our respective commands and other commands as appropriate.

WILLIAM W. HARTZOG  
General, USA  
Commander  
Training and Doctrine Command

J. E. RHODES  
Lieutenant General, USMC  
Commanding General  
Marine Corps Combat Development Command

G. S. HOLDER  
Rear Admiral, USN  
Commander  
Naval Doctrine Command

RONALD E. KEYS  
Major General, USAF  
Commander  
Headquarters Air Force Doctrine Center
PREFACE

1. Scope

This publication—

(1) Defines multiservice joint air attack team (JAAT) operations and describes the capabilities and responsibilities of the team members.

(2) Describes responsibilities associated with planning, organizing, and executing multiservice JAAT operations.

(3) Provides the tactics, techniques, and procedures (TTP) needed for command and control and employment of multiservice JAAT operations.

(4) Provides standardized briefing guides for multiservice JAAT operations.

2. Purpose

This publication standardizes TTP among the services for planning and executing JAAT operations.

3. Application

This publication applies to the operating forces of all services. It provides multiservice TTP for joint air attack team operations. Although the focus of the publication is at the tactical level, it has application for planning and warfighting personnel at all echelons. Any service/ component may initiate a JAAT. JAAT is merely a method of employing forces. The terms maneuver force commander and maneuver commander are representative of any commander (air, land, or sea).

4. Implementation Plan

Participating service command offices of primary responsibility (OPRs) will review this publication, validate the information, and reference and incorporate it in service manuals, regulations, and curricula as follows:

Army. The Army will incorporate the procedures in this publication in US Army training and doctrinal publications as directed by the commander, US Army Training and Doctrine Command (TRADOC). Distribution is in accordance with DA Form 12-11E.

Marine Corps. The Marine Corps will incorporate the procedures in this publication in US Marine Corps training and doctrinal publications as directed by the commanding general, US Marine Corps Combat Development Command (MCCDC). Distribution is in accordance with MCPDS.

Navy. The Navy will incorporate these procedures in US Navy training and doctrinal publications as directed by the commander, Naval Doctrine Command (NDC). Distribution is in accordance with MILSTRIP Desk Guide and NAVSOP Pub 409.

Air Force. Air Force units will validate and incorporate appropriate procedures in accordance with applicable governing directives. Distribution is in accordance with AFI 37-160.

5. User Information

a. The TRADOC-MCCDC-NDC-AFDC Air Land Sea Application (ALSA) Center developed this publication with the joint participation of the approving service commands. ALSA will review and update this publication as necessary.

b. This publication reflects current joint and service doctrine, command and control organizations, facilities, personnel, responsibilities, and procedures. Changes in service protocol, appropriately reflected in joint and service publications, will likewise be incorporated in revisions to this document.
c. We encourage recommended changes for improving this publication. Key your comments to the specific page and paragraph and provide a rationale for each recommendation. Send comments and recommendation directly to—

Army
Commander
US Army Training and Doctrine Command
ATTN: ATDO-A
Fort Monroe VA 23651-5000
DSN 680-3153 COMM (757) 727-3153

Marine Corps
Commanding General
US Marine Corps Combat Development Command
ATTN: C42
3300 Russell Road
Quantico VA 22134-5021
DSN 278-6234 COMM (703) 784-6234

Navy
Naval Doctrine Command
ATTN: N3
1540 Gilbert St
Norfolk VA 23511-2785
DSN 565-0563 COMM (757) 445-0563
E-mail: ndcjoint@nctamslant.navy.mil

Air Force
Headquarters Air Force Doctrine Center
ATTN: DJ
216 Sweeney Blvd, Suite 109
Langley AFB VA 23665-2722
DSN 574-8091 COMM (757) 764-8091
E-mail: afdc.dj@langley.af.mil

ALSA
ALSA Center
ATTN: Director
114 Andrews Street
Langley AFB VA 23665-2785
DSN 574-5934 COMM (757) 764-5934
E-mail: alsadirector@langley.af.mil
JAAT
Multiservice Procedures for Joint Air Attack Team Operations

TABLE OF CONTENTS

EXECUTIVE SUMMARY ........................................................................................................... vi

CHAPTER I THE JOINT AIR ATTACK TEAM
Background ............................................................................................................................ I-1
Command Responsibilities ................................................................................................ I-1
Rotary-Wing Element ........................................................................................................ I-1
Fixed-Wing Aircraft ......................................................................................................... I-2
Indirect Fire Support ....................................................................................................... I-2

CHAPTER II PLANNING
Operational Planning Considerations ................................................................................ II-1
Battlespace Considerations ............................................................................................... II-2
Target Marking/Designation ............................................................................................. II-4
Sources of JAAT Fire Support .......................................................................................... II-4
JAAT Planning Guideline ................................................................................................. II-5
Army/Air Force Component ............................................................................................. II-7
Marine Corps Component ............................................................................................... II-10
Navy Component ............................................................................................................. II-14

*This publication supersedes FM 90-21, October 1991
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>FA Capabilities</td>
</tr>
<tr>
<td>C-2</td>
<td>Mortar Capabilities</td>
</tr>
<tr>
<td>C-3</td>
<td>Naval Surface Fire Support</td>
</tr>
<tr>
<td>D-1</td>
<td>Planning and Execution Considerations</td>
</tr>
<tr>
<td>D-2</td>
<td>JAAT Mass Briefing Guide</td>
</tr>
<tr>
<td>E-1</td>
<td>JAAT Communications Matrix</td>
</tr>
<tr>
<td>E-2</td>
<td>Ground Communication Equipment</td>
</tr>
<tr>
<td>E-3</td>
<td>Rotary-Wing Communications Summary</td>
</tr>
<tr>
<td>E-4</td>
<td>Fixed-Wing Aircraft Communications Summary</td>
</tr>
<tr>
<td>E-5</td>
<td>USMC Fire Support Request Nets</td>
</tr>
<tr>
<td>E-6</td>
<td>Army Fire Support Request Nets</td>
</tr>
<tr>
<td>E-7</td>
<td>Air Force Air Request Net</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

JAAT
Multiservice Procedures for Joint Air Attack Team Operations

The Joint Air Attack Team (JAAT)

The multiservice JAAT is a coordinated attack by rotary- and fixed-wing aircraft, normally supported by artillery or naval surface fire support. Ground or airborne electronic warfare systems may also support the JAAT. JAAT operations support the joint force commander (JFC) in offensive and defensive operations day or night.

Planning

The JAAT offers the commander unique strengths. JAAT operations provide mutual support with an increase in each member’s survivability and a capability to mass combat power through diverse ordnance and employment procedures. The maneuver commander has the responsibility for integrating JAAT missions into the battle plan. The requesting commander’s staff plans for, organizes, and coordinates JAAT operations to support this plan. Successful JAAT execution depends upon careful mission analysis, coordination, and planning. Historically, difficulties in execution are a result of poorly understood planning requirements.

JAAT Execution

Upon receipt of a JAAT mission, the JAAT mission commander must integrate five components of preplanned or immediate JAAT execution—airspace coordination measures, check in and briefings, firepower timing options, attack methods, shifting targets, and disengagement. The JAAT mission commander must also consider risk management as it applies to identifying hazards and implementing controls during planning, preparation and execution. Night employment of the JAAT is also an option with consideration for tactics requiring more deliberate tempo and strict adherence to basic procedures.

Summary

The key to an effective JAAT operation is a clear understanding of component capabilities and employment options and how they can be synchronized to achieve maximum effectiveness. This publication is intended to aid in this understanding.
PROGRAM PARTICIPANTS

The following commands and agencies participated in the development and review of this publication:

Joint

Joint Warfighting Center, Doctrine Division, Ft Monroe, VA

Army

HQ TRADOC, ATDO-A, Ft Monroe, VA
Eighth USA, APO AP
I CORPS, Ft Lewis, WA
III CORPS, Ft Hood, TX
V CORPS, Unit 28357, APO AE
XVIII CORPS (Airborne), Ft Bragg, NC
Operations Group, Eagle Team, National Training Center, Ft Irwin, CA
HHC 1-210, Ft Rucker, AL

Marines

Marine Corps Combat Development Command, Quantico, VA
C3F TACD&E, San Diego, CA
Expeditionary Warfare Training Group Atlantic, Norfolk, VA
MAWTS-1, Yuma, AZ

Navy

Naval Doctrine Command, Norfolk, VA
SWATSLANT, NAS Oceana, VA
Naval Strike Warfare Center, Fallon, CA

Air Force

AFDC/DJ, Langley AFB VA
57 Wing/DTW, Nellis AFB NV
USAF Weapons School/WST, Nellis AFB, NV
USAF Weapons School, F-16 Division, Nellis AFB, NV
70th FS, Moody AFB, GA
81st FS, APO AE
Air Warrior, Nellis AFB NV
Air Warrior Detachment, Ft Irwin CA
18th ASOG/AVN TACP, Pope AFB, NC
25 ASOS, Wheeler AAF, HI
USAF AGOS, Hurlburt Field, FL
DET 6 57th Wing, Ft Irwin, CA

Other

OSD J NCAS J FS, Eglin AFB, FL
Chapter I

THE JOINT AIR ATTACK TEAM

1. Background

A joint air attack team (JAAT) operation is a coordinated attack by rotary- and fixed-wing aircraft, normally supported by artillery or naval surface fire support. Ground or airborne electronic warfare systems may also support the JAAT. JAAT operations support the joint force commander (JFC) in offensive and defensive operations day or night.

2. Command Responsibilities

Normally, the maneuver force commander, within an assigned operational area, is the individual responsible for determining when a JAAT is necessary, but any commander (air, land, or maritime) may request a JAAT. In this publication, the terms maneuver force commander and maneuver commander are representative of any commander (air, land, or sea) with overall command responsibilities within an area of operations (AO).

Designation of a mission commander occurs after coordination between the requesting commander and supporting commanders. The mission commander is responsible for the planning, coordinating, and execution of the JAAT. The mission commander has tactical control (TACON) of JAAT assets to support the commander’s battle plan.

3. Rotary-Wing Element

Rotary-wing aircraft provide firepower, target acquisition, designation, and mission coordination to the JAAT. The Army normally provides attack and scout rotary-wing aircraft for JAAT operations. Under certain circumstances, the Marine Corps could provide rotary-wing attack aircraft. The Navy and Air Force do not have rotary-wing attack aircraft.

a. Army. The Army employs attack and cavalry helicopters in JAAT operations. AH-64 Apaches are organic to attack battalions and are used in the attack as well as the reconnaissance role. OH-58D Kiowa Warriors are organic to light divisions and cavalry units and are used primarily for reconnaissance, but they do have limited attack capabilities. As a minimum, Army helicopters operate in pairs and typically operate in sections or troops/companies of four to eight aircraft. They are usually employed as three flights to provide continuous coverage for the JAAT but may be employed as a battalion-sized flight of 24 aircraft to achieve massed fires on the target. Army aircraft are less vulnerable to enemy air defenses at night; therefore, they generally conduct deep operations at night. Army rotary-wing characteristics and capabilities may be found in Appendix B.

b. Marine Corps. The Marine Corps has limited rotary-wing attack assets. The primary mission of these attack aircraft is to conduct offensive air support (OAS) and armed escort flights for assault support helicopters. Their additional missions are to provide forward air controller (airborne) (FAC[A]) and fire support coordination in aerial and ground operations within an objective area. Marine Corps rotary-wing attack aircraft may operate in conjunction with observer aircraft and/or other tactical air control party (TACP) assets of the Marine air-ground task force (MAGTF). Because of the limited number of assets and the dedicated mission of Marine Corps attack aircraft, they will not normally be