

ARMY, MARINE CORPS, NAVY, AIR FORCE



**AIR LAND SEA
APPLICATION
CENTER**

JATC

MULTI-SERVICE PROCEDURES FOR JOINT AIR TRAFFIC CONTROL

FM 3-52.3 (FM 100-104)

MCRP 3-25A

NTTP 3-56.3

AFTTP(I) 3-2.23

JULY 2003

DISTRIBUTION RESTRICTION Approved for public release;
distribution is unlimited.

MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES

FOREWORD

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



MICHAEL A. VANE
Brigadier General, US Army
Deputy Chief of Staff for
Doctrine, Concepts and Strategy
US Army Training and Doctrine
Command



EDWARD HANEON, JR.
Lieutenant General, USMC
Commanding General
Marine Corps Combat
Development Command



R. A. ROUTE
Rear Admiral, USN
Commander
Navy Warfare Development
Command



DAVID P. MacGHEE, JR.
Major General, USAF
Commander
Headquarters Air Force
Doctrine Center

PREFACE

1. Purpose

This joint air traffic control (JATC) publication meets the needs of the Services by providing procedures on JATC employment and by detailing Service relationships for initial, transition, and sustained JATC operations within the theater or AOR. It also outlines how to synchronize and integrate JATC forces and specialized air traffic control (ATC) equipment.

2. Scope

This multi-Service procedures publication acts as a ready reference source for guidance on ATC responsibilities, procedures, and employment in a joint environment. This publication discusses JATC employment and Service relationships for initial, transition, and sustained ATC operations across the spectrum of joint operations within the theater or area of responsibility (AOR). This publication is UNCLASSIFIED and specifically addresses Service ATC doctrine, forces, capabilities, equipment, and training.

3. Applicability

This publication applies to the operating forces of all Services. Although the focus of the publication is at the tactical level, it has application for planning and warfighting personnel at all levels. The target audience for this publication includes commanders, staffs, warfighters, and agencies at all levels within and supporting a joint force.

4. Implementation Plan

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

Army. Upon approval and authentication, this publication incorporates the procedures contained herein into the US Army Doctrine and Training Literature Program as directed by the Commander, US Army Training and Doctrine Command (TRADOC). Distribution is in accordance with (IAW) initial distribution number (IDN) XXXXXXXX.

Marine Corps. The Marine Corps will incorporate the procedures in this publication in US Marine Corps training and doctrine publications as directed by the Commanding General, US Marine Corps Combat Development Command (MCCDC). Distribution is in accordance with the Marine Corps Publication Distribution System (MCPDS).

Navy. The Navy will incorporate these procedures in US Navy training and doctrine publications as directed by the Commander, Navy Warfare Development Command (NWDC)[I5]. Distribution is in accordance with Military Standard Requisition and Issue Procedure Desk Guide (MILSTRIP Desk Guide) and Navy Standing Operating Procedure Publication 409 (NAV SOP Pub 409).

Marine Corps PCN: 144 000055 00

Air Force. The Air Force will incorporate the procedures in this publication in accordance with applicable governing directives. Distribution is in accordance with Air Force Instruction (AFI) 33-360.

5. User Information

a. TRADOC, MCCDC, NWDC, Headquarters AFDC, and the 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 recommendations directly to—

Army

Commander
US Army Training and Doctrine Command
ATTN: ATDO-A
Fort Monroe, VA 23651-5000
DSN 680-3951 COMM (757) 788-3951
E-mail: doctrine@monroe.army.mil

Marine Corps

Commanding General
US Marine Corps Combat Development Command
ATTN: C42
3300 Russell Road, Suite 318A
Quantico, VA 22134-5021
DSN 278-6233/6234 COMM (703) 784-6233/6234
E-mail: deputydirectordoctrine@mccdc.usmc.mil

Navy

Commander
Navy Warfare Development Command
ATTN: N5
686 Cushing Road
Newport, RI 02841-1207
DSN 948-1164/4189 COMM (401) 841-1164/4189
E-mail: alsapubs@nwdc.navy.mil

Air Force

HQ AFDC/DJ
204 Dodd Blvd, Ste 301
Langley AFB, VA 23665-2788
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 575-0902 COMM (757) 225-0902
E-mail: alsa.director@langley.af.mil

*FM 3-52.3 (FM 100-104)
 *MCRP 3-25A
 *NTTP 3-56.3
 *AFTTP(I) 3-2.23

FM 3-52.3	US Army Training and Doctrine Command Fort Monroe, Virginia
MCRP 3-25A	Marine Corps Combat Development Command Quantico, Virginia
NTTP 3-56.3	Navy Warfare Development Command Newport, Rhode Island
AFTTP(I) 3-2.23	Headquarters Air Force Doctrine Center Maxwell Air Force Base, Alabama

17 July 2003

JATC

MULTI-SERVICE PROCEDURES FOR JOINT AIR TRAFFIC CONTROL

TABLE OF CONTENTS

		Page
EXECUTIVE SUMMARY		VIII
CHAPTER I	PLANNING	I-1
	Background.....	I-1
	Command and Control Relationships	I-1
	Suggested Organization.....	I-3
	Planning Considerations	I-6
CHAPTER II	INITIAL DEPLOYMENT	II-1
	Background.....	II-1
	Initial Entry Planning Considerations	II-1
	Initial Operations.....	II-1
	Transition to Sustained Operations.....	II-4
CHAPTER III	AIR TRAFFIC CONTROL TRANSITION OPERATIONS.....	III-1
	Background.....	III-1

* This publication supersedes FM 100-104, MCRP 3-25A, NWP 3-56.3, and AFTTP(I) 3-2.23, dated 25 January 1999.

	Forces and timelines	III-1
	Transfer of Control.....	III-1
	Example of Air Traffic Control Transition.....	III-2
	Additional Considerations	III-3
CHAPTER IV	SUSTAINMENT OF AIR TRAFFIC CONTROL	
	OPERATIONS	IV-1
	Background.....	IV-1
	Sustained Operations.....	IV-1
	End of Operations	IV-2
APPENDIX A	AIR FORCE AIR TRAFFIC CONTROL.....	A-1
	Doctrine	A-1
	Forces.....	A-1
	Training	A-2
	Air Force ATC Duties and Command and Control	
	Relationships.....	A-3
	Future Plans.....	A-5
	Deployed locations.....	A-6
	Air Force ATC Points of Contact	A-6
APPENDIX B	ARMY TACTICAL AIR TRAFFIC SERVICES	B-1
	Mission.....	B-1
	Doctrine	B-1
	Army Air Traffic Controllers Training.....	B-1
	Organization.....	B-2
	Communications Architecture.....	B-4
	Tactical ATS Points of Contact.....	B-7
APPENDIX C	MARINE CORPS AIR TRAFFIC CONTROL	C-1
	Doctrine	C-1
	Capabilities.....	C-4
	Functions	C-5
	Employment	C-5
	Expeditionary operations.....	C-7
	ATC Detachment Equipment.....	C-8
	Training and Proficiency.....	C-8
	Planning.....	C-10
	Equipment selection and siting considerations	C-16
	Points of Contact.....	C-17
APPENDIX D	NAVY AIR TRAFFIC CONTROL	D-1
	Doctrine	D-1
	Forces.....	D-2
	Training	D-4
	Navy Tactical Air Control Squadron Operating Positions.....	D-5

	Tactical Air Control Squadron Required Operational Capabilities	D-7
	Navy ATC Duties, Responsibilities, and C2 Relationships	D-10
	Navy POCs	D-11
APPENDIX E	AIR TRAFFIC CONTROL EQUIPMENT	E-1
	Army ATC Equipment	E-1
	Marine ATC Equipment	E-4
	Navy Amphibious ATC Equipment.....	E-9
	General Purpose Air Force ATC Equipment.....	E-10
	Communications Capabilities.....	E-23
APPENDIX F	SAMPLE ATC HANDOVER CHECKLIST	F-1
APPENDIX G	SAMPLE NOTICE TO AIRMEN	G-1
APPENDIX H	SAMPLE LETTER OF AGREEMENT	H-1
REFERENCES	Reference-1
GLOSSARY	Glossary-1
INDEX	Index-1
 FIGURES		
	Figure I-1 Example Regional Air Movement Control Center Manning	I-5
	Figure II-1 Scenario With Example Timeline for Initial ATC Capability	II-2
	Figure III-1 Scenario With Transition to Sustained ATC Operations	III-2
	Figure III-2 Planners' Transition Checklist	III-3
	Figure IV-1 Sustainment Options	IV-2
	Figure A-1 Air Force ATC Structure.....	A-3
	Figure A-2 Special Tactics Squadron C2 Structure (SOF JATC).....	A-5
	Figure B-1 A2C2 Cell/AIC Cell Support to Division/Corps.....	B-4
	Figure B-2 Army Tactical ATS Architecture	B-6
	Figure C-1 Marine Air Control Group Subordinate Agencies and Detachments	C-2
	Figure C-2 Marine Air Command and Control System (MACCS).....	C-3
	Figure D-1 Navy Tactical Air Control System.....	D-11
	Figure E-1 AN/MSN-7 Tower Restoral Vehicle	E-14
	Figure E-2 AN/MPN-26 Mobile Air Traffic Control System	E-20

TABLES

Table I-1 JATC Planning Considerations	I-9
Table I-2 Service ATC Capabilities	I-10
Table II-1 Initial JATC Capabilities	II-3
Table III-1 Service Capabilities to Transition to Sustained JATC Operations	III-4
Table A-1 Air Force ATC Special Experience Identifiers (SEI).....	A-2
Table A-2 Air Force Specialty Codes (AFSC) Referenced in JATC MTTP	A-3
Table B-1 Army ATC Skill Identifiers	B-2
Table B-2 Army Communications Capabilities	B-7
Table C-9 Marine ATC Military Occupational Specialties (MOS).....	C-9
Table D-1 US Navy ATC Naval Experience Codes	D-5
Table E-1 AMPHIBIOUS ATC EQUIPMENT.....	E-10
Table E-2 Service-Specific Communications Capabilities	E-23

EXECUTIVE SUMMARY

JATC

Multi-Service Tactics, Techniques, and Procedures for Joint Air Traffic Control

- Provides basic background information on JATC operations
- Outlines the duties, responsibilities, and command and control relationships that influence JATC operations and handover procedures
- Illustrates how Service ATC forces are deployed and employed to perform ATC operations
 - Describes how Service ATC forces conduct ATC during initial, transition, and sustained operations, and provides example timelines
 - Outlines how to synchronize and integrate JATC forces within the theater or AOR
 - Explains how to integrate the Services' ATC equipment and ATC force
 - Describes each Service's ATC doctrine, forces, capabilities, training, and equipment used to perform JATC operations and any additional information and considerations deemed appropriate by individual Services

Joint force planners must understand the elements of each Service's ATC capabilities and be able to synchronize and integrate them to effectively support the joint force commander's requirements. A general understanding of how these forces fit into the flow of a developing theater is required to execute this responsibility. This publication provides the Service-unique information a planner requires in order to employ air traffic services (ATS) in a joint environment. Included are considerations and checklists for planning and executing ATC services during the initial, transition, and sustained phases of operation.

Planning

Chapter I addresses organization modifications; specifically of primary importance is the suggested establishment of an Airspace Integration Entity (specialty team or cell) and a Regional Air Movement Control Center (RAMCC)(especially for nations with a non-functioning civil ATC system) to ensure ATC issues are handled competently. It also details the command and control relationships and planning considerations for tasking ATC capabilities of all four Services, and includes a snapshot of their capabilities. Finally, the chapter details planning considerations for providing instrument navigational aids and/or instrument procedures within a theater or AOR.

Initial Deployment

Chapter II describes how individual Service's ATC capabilities are initially employed in the joint environment. It discusses that, unlike flight operations, where aircraft from several Services may share an airfield, the ATC support is normally provided by a single

Service. Also, the individual Services have not previously pursued joint ATC operations doctrine and efficiencies, which may produce enhanced capabilities and improved flight safety resulting from the combination of multi-Service ATC functions when feasible. It recommends that, now, due to strains in manning, equipment, and mission requirements, the joint planners/multi-Service ATC community should consider joint ATC operations. The chapter also provides planning considerations, Service initial capabilities, and an example scenario for initial ATC operations.

Air Traffic Control Transition Operations

Chapter III describes transitional ATC operations conducted from the time the initial entry ATC resources require replacement, replenishment, augmentation, or upgrade of ATC services until the time that sustainment ATC forces are established. It provides an example transition timeline, transition checklists, Service transition capabilities, and considerations.

Sustainment of Air Traffic Control Operations

Chapter IV covers sustained, long-term ATC operations, through termination of ATC services and end-state considerations. It includes considerations for synchronization, integration, and interoperability of ATC forces within the theater or AOR.

Service Doctrine, Forces, Capabilities, Training, Equipment, etc., and Examples

The appendices provide details on the four Services' ATC doctrine, forces, capabilities, equipment, and training, as well as helpful example checklists and documents. The appendices provide a baseline understanding of component capabilities for conducting ATC operations in a joint environment by providing a description of:

- The doctrinal framework which each Service uses to execute JATC operations
- The Service-specific forces capable of deploying and executing JATC operations
- The Service-specific equipment and systems used to control air traffic in the theater or AOR
- The specific ATC organizations and capabilities each Service has available
- The training each Service provides for ATC personnel
- Additional information and considerations deemed appropriate by individual Services
- ATC operations handover checklists
- Sample NOTAMs
- Memorandum/Letter of Agreement

PROGRAM PARTICIPANTS

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

Joint

US Transportation Command, Scott AFB, IL

Army

US Army Training and Doctrine Command, DCSDCS (ATDO-A), Ft Monroe, VA

US Army Aviation Center, Directorate of Combat Developments (ATZQ-CD), Ft Rucker, AL

US Army Air Traffic Services Command (Provisional) (AFATS-C), Ft McPherson, GA

Marine Corps

Marine Corps Combat Development Command, Joint Doctrine Br (C427), Quantico, VA

Marine Aviation Weapons and Tactics Squadron 1, C-3 MATC Division, Yuma AZ

Navy

Commander, Navy Warfare Development Command, Newport, RI

Commander, Tactical Air Control Group 2, NAB Little Creek, Norfolk, VA

Commander, Tactical Air Control Squadron 22, NAB Little Creek, Norfolk, VA

Air Force

Air Force Doctrine Center, Detachment 1, Langley AFB, VA

Headquarters Air Combat Command (DOR), Langley AFB, VA

Headquarters Air Force Special Operations Command (DOOF), Hurlburt Field, FL

Headquarters United States Air Force (XOOS), Washington, DC

720th Special Tactics Group, Hurlburt Field, FL

Air Force Flight Standard Agency, Andrews AFB, MD

Aerospace Command and Control Agency, Langley AFB, VA

Air National Guard

Headquarters Air National Guard (C4A), Washington, DC

Chapter I

PLANNING

1. Background

a. When planning the deployment of air traffic services (ATS), it is crucial for a joint planner to know the condition and capabilities of airfields, navigational aids, airspace considerations, and other air traffic control (ATC) resources in the area of operations (AO). This information enables the joint force planner to determine the types and mix of assets required to support initial operations up until the time in which a full ATC sustainment package is deployed.

b. This chapter details the command and control (C2) relationships and planning considerations for tasking ATC capabilities of all four Services and includes a snapshot of their capabilities for conducting joint air traffic control (JATC).

2. Command and Control Relationships

a. Relationships. The following guidance outlines duties and responsibilities during a joint operation. Discussion of an airspace integration entity (specialty team or cell) and a RAMCC will be covered in section 3.

(1) Combatant Commander: The Combatant Commander's joint forces air component commander (JFACC) determines initial ATC requirements at specific deployment locations based upon the operational requirements.

(2) Joint Force Commander (JFC). A general term applied to a combatant commander, subunified commander, or joint task force (JTF) commander authorized to exercise combatant command (command authority) or operational control over a joint force (Joint Publication [JP] 1-02). In addition, the JFC exercises operational control (OPCON) over assigned forces, and normally over attached forces, to include ATC forces. The JFC directs employment of ATC assets and handoff of responsibility from one unit to another (single Service, joint, multinational [coalition or allied], or host nation) through the airspace control plan (ACP), published by the airspace control authority (ACA). Additionally, the JFC establishes requirements for liaisons in inter-Service, coalition, and host nation facilities.

(3) Joint Force Air 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 assigned, attached, and/or made available for tasking air forces; planning and coordinating air operations; or accomplishing such operational missions as may be assigned. The JFACC is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. (JP 1-02)

(4) Airspace Control Authority. The commander designated to assume overall responsibility for the operation of airspace control system in the airspace control area (JP 1-02). When the JFC designates a JFACC, the JFACC normally assumes ACA responsibilities since airspace control is an integral part of joint air operations. As the designated commander for joint air operations, the responsibility for planning, coordinating, and developing airspace control procedures and operating an airspace control