

**CHANGE**

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

**JO 7210.3W  
CHG 2**

Air Traffic Organization Policy

**Effective Date:**  
March 10, 2011

**SUBJ:** Facility Operation and Administration

---

- 1. Purpose of This Change.** This change transmits revised pages to Federal Aviation Administration Order JO 7210.3W, Facility Operation and Administration, and the Briefing Guide.
- 2. Audience.** This change applies to all Air Traffic Organization (ATO) personnel and anyone using ATO directives.
- 3. Where Can I Find This Change?** This change is available on the FAA Web site at [http://faa.gov/air\\_traffic/publications](http://faa.gov/air_traffic/publications) and [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/).
- 4. Explanation of Policy Change.** See the Explanation of Changes attachment which has editorial corrections and changes submitted through normal procedures. The Briefing Guide lists only new or modified material, along with background.
- 5. Distribution.** This change is distributed to selected offices in Washington headquarters, service area offices, regional offices, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, all air traffic field facilities, international aviation field offices, and interested aviation public.
- 6. Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.
- 7. Page Control Chart.** See the page control chart attachment.



Elizabeth L. Ray  
Vice President, Mission Support Services  
Air Traffic Organization

Date: January 6, 2011



## Explanation of Changes

### Change 2

#### Direct questions through appropriate facility/service center office staff to the office of primary responsibility (OPR)

**a. 2-1-12. INTERSECTION TAKEOFFS**

This note change clarifies the fact that the concept of declared distances utilized by the Airport Service has no bearing on air traffic control operations. This change cancels and incorporates N JO 7210.746, Intersection Takeoffs, effective May 1, 2010.

**b. 2-1-28. SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES**

This new paragraph directs facility managers to ensure prompt notification to the DEN of any suspicious aircraft/pilot activities as defined in FAA Order JO 7610.4, paragraph 7-3-1. This change cancels and incorporates N JO 7210.751, Aircraft Communication Status, effective October 1, 2010.

**c. 2-2-3. POSITION RESPONSIBILITY;  
3-4-2. ASSIGNMENT OF RECORDER CHANNELS;  
17-3-1. ATCSCC; and  
17-5-7. TERMINAL INTER-FACILITY COORDINATION**

This editorial change adds national to the title for traffic management specialists. These will now read as follows: national traffic management specialist (NTMS) and national traffic management specialist-in-charge (NTMSIC).

**d. 2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY**

The change adds the requirement to include communication status to the transfer of position checklist. This change cancels and incorporates N JO 7210.751, Aircraft Communication Status, effective October 1, 2010.

**e. 2-3-3. REQUIREMENTS**

This change incorporates the answer to an interpretation by including positions that do not count towards currency requirements.

**f. 2-6-1. WATCH SUPERVISION**

The FAA concurred a NTSB proposal recommending that controllers should refrain from performing administrative tasks. This change cancels and incorporates N JO 7210.744, Watch Supervision, effective May 1, 2010.

**g. 2-6-5. CONSOLIDATING POSITIONS; and,  
10-3-8. TAXI INTO POSITION AND HOLD (TIPH) OPERATIONS**

In accordance with the Runway Safety Call-to-Action Committee Recommendations and the SRM Document, dated May 19, 2009, this change replaces all references of "Taxi Into Position and Hold (TIPH)" with "Line Up and Wait (LUAW)." This change cancels and incorporates N JO 7210.754, Line Up and Wait, effective September 30, 2010.

**h. 3-4-3. CHECKING AND CHANGING RECORDER TAPES; and 3-4-4. HANDLING RECORDER TAPES OR DATs**

This change updates the order to reflect equipment already in use.

**i. 3-9-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS)**

This change removes references to the National Aeronautical Charting Office (NACO), and replaces it with Aeronautical Navigation Products (AeroNav) and National Flight Procedures Office (NFPO), and replaces it with Terminal Procedures and Charting Group due to their reorganization. It also revises the current process language and brings the directive in line with the Aero Nav procedures for waiver processing. Additionally, to harmonize the MVA review and certification process with that of Terminal Instrument Approach procedures, MVA reviews will now be required on a periodic basis, at least once every two years. This change cancels and incorporates N JO 7210.756, Minimum Vectoring Altitude Charts (MVAC) Preparation (Terminal/MEARTS), effective September 7, 2010.

**j. 3-9-5 ESTABLISHING DIVERSE VECTOR AREA/S (DVA)**

This change details a revised administrative process for requesting a Diverse Vector Area and removes content not necessary and confusing concerning increased climb gradients in the development of DVAs.

**k. 4-3-2. APPROPRIATE SUBJECTS**

This change inserts a NOTE that further clarifies "the intent of these Letters of Agreement (LOAs) is to use them where airports have standard routes that traverse move-

ment areas on a long term basis and that these LOAs are not intended to allow short term operations, single situations or “open- field” clearances.” An example of an LOA is added to include between a tower and/or FSS and an airport manager/aircraft operator at airports upon which the tower is located and/or the FSS is remote.

**l. 4-6-4. FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION; and  
4-6-5. PREPARATION OF FAA FORM 7230-4**

This change adds a requirement for En Route and Oceanic and Terminal Air Traffic Control facilities to use the electronic version of FAA Form 7230-4, Daily Record of Facility Operation, provided in CEDAR. This change cancels and incorporates N JO 7210.755, Comprehensive Electronic Data Analysis and Reporting (CEDAR), effective August 9, 2010.

**m. 5-3-7. OPEN SKIES TREATY AIRCRAFT**

This editorial change enhances the paragraph title adding priority flights and corrects a reference.

**n. 10-3-10. MULTIPLE RUNWAY CROSSINGS**

This new paragraph establishes guidance for authorizing multiple runway crossings at airports where the taxi route between runway centerlines is less than 1,000 feet. This change cancels and incorporates N JO 7210.747, Multiple Runway Crossings, effective June 30, 2010.

**o. 10-6-9. RUNWAY EDGE LIGHTS ASSOCIATED WITH MEDIUM APPROACH LIGHT SYSTEM/RUNWAY ALIGNMENT INDICATOR LIGHTS**

This change corrects the MALSR step intensity settings, to comply with guidance provided in FAA Order

6850.2A, Visual Guidance Lighting Systems, Chapter 2, Paragraph 210, TBL 2-3 Brightness Steps. This change cancels and incorporates N JO 7210.757, Runway Edge Lights Associated with Medium Approach Light System/Runway Alignment Indicator Lights, effective October 1, 2010.

**p. 17-20-3. DEFINITION**

The change to the NAS is the introduction of National Playbook routes developed to take advantage of enhanced navigation technology such as RNAV, DPs, and STARS. This change cancels and incorporates N JO 7210.734, National Playbook Definition, effective April 15, 2010.

**q. 20-3-3. AIR TRAFFIC SECURITY LIAISON (ATSL)**

With a recent reorganization, this paragraph is no longer needed and has been removed.

**r. 20-4-2. PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED VIP MOVEMENT; and 20-4-3. SPECIAL INTEREST FLIGHTS (SIFs)**

This change reflects that the SOSOC is now under Tactical Operations Security, vice Startegic Operations Security.

s. Additional editorial/format changes were made where necessary. Revision bars were not used because of the insignificant nature of these changes.

**PAGE CONTROL CHART**

| <b>REMOVE PAGES</b>                            | <b>DATED</b> | <b>INSERT PAGES</b>                            | <b>DATED</b> |
|--|--------------|--|--------------|
| Table of Contents i through xi . . . . .       | 2/11/10      | Table of Contents i through xi . . . . .       | 3/10/11      |
| Table of Contents xii . . . . .                | 8/26/10      | Table of Contents xii . . . . .                | 3/10/11      |
| Table of Contents xiii through xvi . . . . .   | 2/11/10      | Table of Contents xiii through xvi . . . . .   | 3/10/11      |
| Table of Contents xvii through xxiii . . . . . | 8/26/10      | Table of Contents xvii through xxiii . . . . . | 3/10/11      |
| 2-1-5 through 2-1-10 . . . . .                 | 2/11/10      | 2-1-5 through 2-1-11 . . . . .                 | 3/10/11      |
| 2-2-1 and 2-2-2 . . . . .                      | 2/11/10      | 2-2-1 and 2-2-2 . . . . .                      | 3/10/11      |
| 2-2-3 . . . . .                                | 8/26/10      | 2-2-3 . . . . .                                | 3/10/11      |
| 2-2-4 through 2-2-7 . . . . .                  | 2/11/10      | 2-2-4 through 2-2-7 . . . . .                  | 3/10/11      |
| 2-3-1 . . . . .                                | 2/11/10      | 2-3-1 . . . . .                                | 3/10/11      |
| 2-6-1 through 2-6-3 . . . . .                  | 2/11/10      | 2-6-1 through 2-6-3 . . . . .                  | 3/10/11      |
| 2-6-4 . . . . .                                | 2/11/10      | 2-6-4 . . . . .                                | 2/11/10      |
| 3-4-1 . . . . .                                | 2/11/10      | 3-4-1 . . . . .                                | 2/11/10      |
| 3-4-2 and 3-4-3 . . . . .                      | 2/11/10      | 3-4-2 and 3-4-3 . . . . .                      | 3/10/11      |
| 3-9-1 through 3-9-6 . . . . .                  | 8/26/10      | 3-9-1 through 3-9-8 . . . . .                  | 3/10/11      |
| 4-3-1 . . . . .                                | 2/11/10      | 4-3-1 . . . . .                                | 2/11/10      |
| 4-3-2 through 4-3-6 . . . . .                  | 2/11/10      | 4-3-2 through 4-3-7 . . . . .                  | 3/10/11      |
| 4-6-1 through 4-6-4 . . . . .                  | 2/11/10      | 4-6-1 through 4-6-4 . . . . .                  | 3/10/11      |
| 4-6-5 and 4-6-6 . . . . .                      | 8/26/10      | 4-6-5 and 4-6-6 . . . . .                      | 3/10/11      |
| 5-3-3 . . . . .                                | 2/11/10      | 5-3-3 . . . . .                                | 3/10/11      |
| 10-3-3 and 10-3-4 . . . . .                    | 2/11/10      | 10-3-3 through 10-3-5 . . . . .                | 3/10/11      |
| 10-6-3 . . . . .                               | 2/11/10      | 10-6-3 . . . . .                               | 2/11/10      |
| 10-6-4 . . . . .                               | 2/11/10      | 10-6-4 . . . . .                               | 3/10/11      |
| 17-3-1 . . . . .                               | 2/11/10      | 17-3-1 . . . . .                               | 3/10/11      |
| 17-4-1 . . . . .                               | 2/11/10      | 17-4-1 . . . . .                               | 3/10/11      |
| 17-4-2 . . . . .                               | 2/11/10      | 17-4-2 . . . . .                               | 2/11/10      |
| 17-5-3 . . . . .                               | 8/26/10      | 17-5-3 . . . . .                               | 8/26/10      |
| 17-5-4 . . . . .                               | 8/26/10      | 17-5-4 . . . . .                               | 3/10/11      |
| 17-20-1 and 17-20-2 . . . . .                  | 2/11/10      | 17-20-1 and 17-20-2 . . . . .                  | 3/10/11      |
| 20-3-1 . . . . .                               | 2/11/10      | 20-3-1 . . . . .                               | 3/10/11      |
| 20-4-1 . . . . .                               | 2/11/10      | 20-4-1 . . . . .                               | 3/10/11      |
| 20-4-2 . . . . .                               | 2/11/10      | 20-4-2 . . . . .                               | 2/11/10      |
| 20-5-1 . . . . .                               | 2/11/10      | 20-5-1 . . . . .                               | 3/10/11      |
| Index I-1 through I-7 . . . . .                | 8/26/10      | Index I-1 through I-7 . . . . .                | 3/10/11      |



# Table of Contents

## Part 1. BASIC

### Chapter 1. General

#### Section 1. Introduction

| <b>Paragraph</b>  | <b>Page</b> |
|---|-------------|
| 1-1-1. PURPOSE OF THIS ORDER .....  | 1-1-1       |
| 1-1-2. AUDIENCE .....   | 1-1-1       |
| 1-1-3. WHERE TO FIND THIS ORDER .....                                       | 1-1-1       |
| 1-1-4. WHAT THIS ORDER CANCELS .....  | 1-1-1       |
| 1-1-5. EXPLANATION OF CHANGES .....   | 1-1-1       |
| 1-1-6. SUBMISSION CUTOFF AND EFFECTIVE DATES .....                          | 1-1-1       |
| 1-1-7. DELIVERY DATES .....   | 1-1-1       |
| 1-1-8. CONSTRAINTS GOVERNING SUPPLEMENTS AND PROCEDURAL<br>DEVIATIONS ..... | 1-1-1       |
| 1-1-9. SAFETY MANAGEMENT SYSTEM (SMS) .....                                 | 1-1-2       |
| 1-1-10. REFERENCES TO FAA NON-AIR TRAFFIC ORGANIZATION .....                | 1-1-2       |
| 1-1-11. DISTRIBUTION .....  | 1-1-2       |

#### Section 2. Order Use

|                            |       |
|----------------------------|-------|
| 1-2-1. POLICY .....        | 1-2-1 |
| 1-2-2. ANNOTATIONS .....   | 1-2-1 |
| 1-2-3. WORD MEANINGS ..... | 1-2-1 |
| 1-2-4. ABBREVIATIONS ..... | 1-2-1 |

### Chapter 2. Administration of Facilities

#### Section 1. General

|  |       |
|--|-------|
| 2-1-1. INTERREGIONAL REQUIREMENTS .....  | 2-1-1 |
| 2-1-2. FACILITY STANDARD OPERATING PROCEDURES DIRECTIVE .....                              | 2-1-1 |
| 2-1-3. POSITION/SECTOR BINDERS .....   | 2-1-1 |
| 2-1-4. REFERENCE FILES .....   | 2-1-1 |
| 2-1-5. RELEASE OF INFORMATION .....  | 2-1-1 |
| 2-1-6. CHECKING ACCURACY OF PUBLISHED DATA .....   | 2-1-2 |
| 2-1-7. AIR TRAFFIC SERVICE (ATS) CONTINUITY .....  | 2-1-2 |
| 2-1-8. HANDLING BOMB THREAT INCIDENTS .....  | 2-1-3 |
| 2-1-9. HANDLING MANPADS INCIDENTS .....  | 2-1-4 |
| 2-1-10. AIRPORT EMERGENCY PLANS .....  | 2-1-4 |
| 2-1-11. EXPLOSIVES DETECTION K-9 TEAMS .....   | 2-1-5 |
| 2-1-12. INTERSECTION TAKEOFFS .....  | 2-1-5 |
| 2-1-13. AIRCRAFT IDENTIFICATION PROBLEMS .....   | 2-1-6 |
| 2-1-14. APPROACH CONTROL CEILING .....   | 2-1-6 |
| 2-1-15. AUTHORIZATION FOR SEPARATION SERVICES BY TOWERS .....                              | 2-1-6 |
| 2-1-16. BIRD HAZARDS .....   | 2-1-7 |
| 2-1-17. PROHIBITED/RESTRICTED AREAS .....  | 2-1-7 |
| 2-1-18. WASHINGTON, DC, SPECIAL FLIGHT RULES AREA (DC SFRA)/ATC<br>SECURITY SERVICES ..... | 2-1-8 |

| <b>Paragraph</b>   | <b>Page</b> |
|--|-------------|
| 2-1-19. AIRPORT TRAFFIC PATTERNS .....   | 2-1-9       |
| 2-1-20. OBSTACLE IDENTIFICATION SURFACES, OBSTACLE FREE ZONES,<br>RUNWAY SAFETY AREAS, AND CLEARWAYS ..... | 2-1-9       |
| 2-1-21. FACILITY IDENTIFICATION .....  | 2-1-9       |
| 2-1-22. DISPOSITION OF OBSOLETE CHARTS .....   | 2-1-9       |
| 2-1-23. OUTDOOR LASER DEMONSTRATIONS .....   | 2-1-9       |
| 2-1-24. COMBINE/RECOMBINE AN ATCT/TRACON .....   | 2-1-10      |
| 2-1-25. SUBMISSION OF AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA)<br>DATA .....                          | 2-1-10      |
| 2-1-26. SUBMISSION OF SUA AND PAJA FREQUENCY INFORMATION .....   | 2-1-10      |
| 2-1-27. REPORTING UNAUTHORIZED LASER ILLUMINATION OF AIRCRAFT ....   | 2-1-10      |
| 2-1-28. SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES .....   | 2-1-11      |

**Section 2. Responsibilities**

|  |       |
|--|-------|
| 2-2-1. LEGAL LIABILITIES OF PERSONNEL .....                                      | 2-2-1 |
| 2-2-2. JOB REQUIREMENTS .....  | 2-2-1 |
| 2-2-3. POSITION RESPONSIBILITY .....   | 2-2-1 |
| 2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION<br>RESPONSIBILITY ..... | 2-2-1 |
| 2-2-5. OPERATING INITIALS .....  | 2-2-3 |
| 2-2-6. SIGN IN/OUT AND ON/OFF PROCEDURES .....                                   | 2-2-3 |
| 2-2-7. CIRNOT HANDLING .....   | 2-2-4 |
| 2-2-8. GENOT HANDLING .....  | 2-2-4 |
| 2-2-9. PERSONNEL BRIEFINGS REGARDING AIR TRAFFIC BULLETIN ITEMS ....             | 2-2-5 |
| 2-2-10. LAW ENFORCEMENT INFORMATION .....  | 2-2-5 |
| 2-2-11. PERSONNEL BRIEFINGS REGARDING ORDER CHANGES .....                        | 2-2-5 |
| 2-2-12. SYSTEMS MANAGEMENT OF VSCS EQUIPMENT .....                               | 2-2-5 |
| 2-2-13. REPORTING EQUIPMENT TROUBLE .....  | 2-2-5 |
| 2-2-14. FACILITY DIRECTIVES REPOSITORY (FDR) .....                               | 2-2-6 |

**Section 3. Air Traffic Familiarization/Currency Requirements for  
En Route/Terminal/Flight Service Facilities**

|                           |       |
|---------------------------|-------|
| 2-3-1. GENERAL .....      | 2-3-1 |
| 2-3-2. APPLICATION .....  | 2-3-1 |
| 2-3-3. REQUIREMENTS ..... | 2-3-1 |
| 2-3-4. DIFFERENTIAL ..... | 2-3-1 |

**Section 4. Hours of Duty**

|                                |       |
|--------------------------------|-------|
| 2-4-1. SERVICE HOURS .....     | 2-4-1 |
| 2-4-2. TIME STANDARDS .....    | 2-4-1 |
| 2-4-3. TIME CHECKS .....       | 2-4-1 |
| 2-4-4. STATUS OF SERVICE ..... | 2-4-1 |

**Section 5. Watch Coverage-Flight Service Stations**

|   |       |
|---|-------|
| 2-5-1. BASIC WATCH SCHEDULES .....                  | 2-5-1 |
| 2-5-2. DESIGNATING WATCH SUPERVISION COVERAGE ..... | 2-5-1 |
| 2-5-3. AREA SUPERVISION .....                       | 2-5-1 |
| 2-5-4. RELIEF PERIODS .....                         | 2-5-1 |
| 2-5-5. OVERTIME DUTY .....                          | 2-5-2 |
| 2-5-6. HOLIDAY STAFFING .....                       | 2-5-2 |



| <b>Paragraph</b>                                  | <b>Page</b> |
|---|-------------|
| 2-5-7. CONSOLIDATING POSITIONS .....              | 2-5-2       |
| 2-5-8. SUPERVISORS HOURS OF DUTY .....            | 2-5-2       |
| 2-5-9. FACILITY COMPLEMENTS .....                 | 2-5-2       |
| 2-5-10. CONTROLLER-IN-CHARGE (CIC) TRAINING ..... | 2-5-2       |

**Section 6. Watch Supervision-Terminal/En Route**

|   |       |
|---|-------|
| 2-6-1. WATCH SUPERVISION .....                            | 2-6-1 |
| 2-6-2. WATCH SUPERVISION ASSIGNMENTS .....                | 2-6-1 |
| 2-6-3. CONTROLLER-IN-CHARGE (CIC) DESIGNATION .....       | 2-6-2 |
| 2-6-4. CONTROLLER-IN-CHARGE (CIC) SELECTION PROCESS ..... | 2-6-2 |
| 2-6-5. CONSOLIDATING POSITIONS .....                      | 2-6-2 |
| 2-6-6. RELIEF PERIODS .....                               | 2-6-3 |
| 2-6-7. BASIC WATCH SCHEDULE .....                         | 2-6-3 |
| 2-6-8. OVERTIME DUTY .....                                | 2-6-3 |
| 2-6-9. HOLIDAY STAFFING .....                             | 2-6-3 |
| 2-6-10. ADMINISTRATIVE HOURS OF DUTY .....                | 2-6-4 |
| 2-6-11. FACILITY COMPLEMENTS .....                        | 2-6-4 |
| 2-6-12. CONSOLIDATING TOWER/TRACON FUNCTIONS .....        | 2-6-4 |

**Section 7. Appearance and Security**

|  |       |
|--|-------|
| 2-7-1. PERSONNEL APPEARANCE .....                      | 2-7-1 |
| 2-7-2. QUARTERS APPEARANCE .....                       | 2-7-1 |
| 2-7-3. BULLETIN BOARDS .....                           | 2-7-1 |
| 2-7-4. FOOD AND BEVERAGES .....                        | 2-7-1 |
| 2-7-5. FACILITY SECURITY .....                         | 2-7-1 |
| 2-7-6. SUSPICIOUS ACTIVITIES .....                     | 2-7-1 |
| 2-7-7. COOPERATION WITH LAW ENFORCEMENT AGENCIES ..... | 2-7-1 |
| 2-7-8. FACILITY VISITORS .....                         | 2-7-1 |
| 2-7-9. SECURITY OF JOINT-USE RADAR DATA .....          | 2-7-2 |

**Section 8. Medical**

|  |       |
|--|-------|
| 2-8-1. GENERAL .....                                   | 2-8-1 |
| 2-8-2. MEDICAL CLEARANCE REQUIREMENTS .....            | 2-8-1 |
| 2-8-3. SPECIAL MEDICAL EVALUATIONS .....               | 2-8-1 |
| 2-8-4. SPECIAL CONSIDERATION .....                     | 2-8-1 |
| 2-8-5. USE OF DRUGS AND SEDATIVES .....                | 2-8-1 |
| 2-8-6. RESTRICTED DRUGS .....                          | 2-8-2 |
| 2-8-7. BLOOD DONORS .....                              | 2-8-2 |
| 2-8-8. USE OF ALCOHOL AND OTHER DRUGS .....            | 2-8-2 |
| 2-8-9. MEDICAL STATUS DETERMINATIONS ON FG-2154s ..... | 2-8-2 |

**Section 9. Weather/Visibility**

|   |       |
|---|-------|
| 2-9-1. BACKUP/AUGMENTATION OF WEATHER OBSERVATIONS .....                              | 2-9-1 |
| 2-9-2. RECEIPT AND DISSEMINATION OF WEATHER OBSERVATIONS .....                        | 2-9-1 |
| 2-9-3. LIMITED AVIATION WEATHER REPORTING STATION (LAWRS) HOURS<br>OF OPERATION ..... | 2-9-1 |
| 2-9-4. NONAVIATION WEATHER SERVICE .....  | 2-9-1 |
| 2-9-5. NATIONAL WEATHER RECORDS CENTER .....  | 2-9-2 |
| 2-9-6. VISIBILITY CHARTS .....  | 2-9-2 |

| <b>Paragraph</b>  | <b>Page</b> |
|---|-------------|
| 2-9-7. SITING CRITERIA FOR VISUAL WEATHER OBSERVATIONS .....                      | 2-9-2       |
| 2-9-8. RUNWAY VISUAL VALUE (RVV) AND RUNWAY VISUAL RANGE (RVR)<br>EQUIPMENT ..... | 2-9-2       |
| 2-9-9. SPECIFIC AREA MESSAGE ENCODING (SAME) WEATHER RADIOS .....                 | 2-9-3       |

**Section 10. Wind/Altimeter Information**

|  |        |
|--|--------|
| 2-10-1. WIND INSTRUMENT SENSORS .....                | 2-10-1 |
| 2-10-2. WIND INDICATOR CROSS CHECK .....             | 2-10-1 |
| 2-10-3. ALTIMETER REQUIREMENTS .....                 | 2-10-1 |
| 2-10-4. COMPARISON CHECKS .....                      | 2-10-1 |
| 2-10-5. DELIVERY OF ALTIMETER SETTING TO ARTCC ..... | 2-10-2 |
| 2-10-6. BROADCAST DENSITY ALTITUDE ADVISORY .....    | 2-10-2 |

**Chapter 3. Facility Equipment**

**Section 1. General**

|  |       |
|--|-------|
| 3-1-1. BASIC EQUIPMENT .....   | 3-1-1 |
| 3-1-2. PERIODIC MAINTENANCE .....  | 3-1-1 |
| 3-1-3. NATIONAL AIRSPACE SYSTEM (NAS) CHANGES .....                                | 3-1-1 |
| 3-1-4. TRAFFIC LIGHTS, GATES, AND SIGNALS .....                                    | 3-1-1 |
| 3-1-5. CLEANING INSTRUMENT COVERS .....  | 3-1-2 |
| 3-1-6. ENGINE GENERATOR TRANSFER PROCEDURES FOR ANTICIPATED<br>POWER FAILURE ..... | 3-1-2 |

**Section 2. Use of Communications**

|   |       |
|---|-------|
| 3-2-1. RESPONSIBILITY .....   | 3-2-1 |
| 3-2-2. AUTHORIZED MESSAGES NOT DIRECTLY ASSOCIATED WITH AIR TRAFFIC<br>SERVICES ..... | 3-2-1 |
| 3-2-3. USE OF OTHER THAN FAA COMMUNICATIONS CIRCUITS .....                            | 3-2-1 |
| 3-2-4. FBI USE OF FAA FREQUENCIES .....   | 3-2-1 |
| 3-2-5. AERONAUTICAL ADVISORY STATIONS (UNICOM/MULTICOM) .....                         | 3-2-2 |

**Section 3. Communications Procedures**

|  |       |
|--|-------|
| 3-3-1. SERVICE "F" COMMUNICATIONS .....                | 3-3-1 |
| 3-3-2. TELEPHONE COMMUNICATIONS .....                  | 3-3-1 |
| 3-3-3. MONITORING FREQUENCIES .....                    | 3-3-1 |
| 3-3-4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHz ..... | 3-3-1 |
| 3-3-5. BATTERY-POWERED TRANSCEIVERS .....              | 3-3-2 |
| 3-3-6. FACILITY STATUS REPORT .....                    | 3-3-2 |
| 3-3-7. TESTING EMERGENCY LOCATOR TRANSMITTERS .....    | 3-3-2 |
| 3-3-8. VSCS FREQUENCY BACKUP .....                     | 3-3-2 |
| 3-3-9. VSCS RECONFIGURATIONS .....                     | 3-3-3 |
| 3-3-10. VTABS (VSCS TRAINING AND BACKUP SYSTEM) .....  | 3-3-3 |

**Section 4. Recorders**

|   |       |
|---|-------|
| 3-4-1. USE OF RECORDERS .....                               | 3-4-1 |
| 3-4-2. ASSIGNMENT OF RECORDER CHANNELS .....                | 3-4-1 |
| 3-4-3. CHECKING AND CHANGING REORDING EQUIPMENT .....       | 3-4-2 |
| 3-4-4. HANDLING RECORDER TAPES, DATs, OR DALR STORAGE ..... | 3-4-2 |

| <b>Paragraph</b>                 | <b>Page</b> |
|----------------------------------|-------------|
| 3-4-5. VSCS DATA RETENTION ..... | 3-4-3       |

**Section 5. Navigational Aids**

|  |       |
|--|-------|
| 3-5-1. NAVAID MONITORING .....                     | 3-5-1 |
| 3-5-2. SYSTEM COMPONENT MALFUNCTIONS .....         | 3-5-2 |
| 3-5-3. PROCESSING GPS ANOMALY REPORTS .....        | 3-5-2 |
| 3-5-4. ORIGINATING NOTAMs CONCERNING NAVAIDS ..... | 3-5-2 |

**Section 6. Direction Finders**

|   |       |
|---|-------|
| 3-6-1. DF ANTENNA SITE .....                  | 3-6-1 |
| 3-6-2. STROBE LINE INDICATION .....           | 3-6-1 |
| 3-6-3. EQUIPMENT LIMITATIONS .....            | 3-6-1 |
| 3-6-4. INACCURATE BEARING INDICATION .....    | 3-6-1 |
| 3-6-5. COMMISSIONING DF EQUIPMENT .....       | 3-6-1 |
| 3-6-6. OPERATING PROCEDURES .....             | 3-6-1 |
| 3-6-7. ASR-ASSOCIATED DF .....                | 3-6-2 |
| 3-6-8. ASSIGNING HEADING USING DF/ASR .....   | 3-6-2 |
| 3-6-9. CANCELING DF APPROACH PROCEDURES ..... | 3-6-2 |

**Section 7. Radar Use**

|   |       |
|---|-------|
| 3-7-1. COMMISSIONING RADAR FACILITIES .....                     | 3-7-1 |
| 3-7-2. RADAR USE .....  | 3-7-2 |
| 3-7-3. ATC RADAR BEACON SYSTEM DECODER CONTROL BOX CHECKS ..... | 3-7-2 |
| 3-7-4. MONITORING OF MODE 3/A RADAR BEACON CODES .....          | 3-7-2 |
| 3-7-5. RADAR TARGET SIZING .....                                | 3-7-3 |
| 3-7-6. TERMINAL DIGITAL RADAR SYSTEM AND DISPLAY SETTINGS ..... | 3-7-3 |
| 3-7-7. PREARRANGED COORDINATION .....                           | 3-7-3 |

**Section 8. Video Maps**

|   |       |
|---|-------|
| 3-8-1. TOLERANCE FOR RADAR FIX ACCURACY ..... | 3-8-1 |
| 3-8-2. RADAR MAPPING STANDARDS .....          | 3-8-1 |
| 3-8-3. DISPLAY MAP DATA .....                 | 3-8-1 |
| 3-8-4. INTENSITY .....                        | 3-8-1 |
| 3-8-5. COMMON REFERENCE POINTS .....          | 3-8-2 |

**Section 9. Other Displays**

|   |       |
|---|-------|
| 3-9-1. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) FOR FACILITIES PROVIDING TERMINAL APPROACH CONTROL SERVICES ..... | 3-9-1 |
| 3-9-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS) .....                               | 3-9-1 |
| 3-9-3. ALTITUDE ASSIGNMENTS TO S/VFR AND VFR AIRCRAFT .....   | 3-9-3 |
| 3-9-4. EMERGENCY OBSTRUCTION VIDEO MAP (EOVM) .....   | 3-9-4 |
| 3-9-5. ESTABLISHING DIVERSE VECTOR AREA/S (DVA) .....   | 3-9-6 |

**Section 10. Color Displays-Terminal**

|   |        |
|---|--------|
| 3-10-1. COLOR USE ON ATC DISPLAYS ..... | 3-10-1 |
|---|--------|

**Chapter 4. Correspondence, Conferences, Records, and Reports**

**Section 1. General**

|                                       |       |
|---------------------------------------|-------|
| 4-1-1. CORRESPONDENCE STANDARDS ..... | 4-1-1 |
|---------------------------------------|-------|

| <b>Paragraph</b>  | <b>Page</b> |
|---|-------------|
| 4-1-2. SIGNATURE .....                                  | 4-1-1       |
| 4-1-3. SERVICE AREA REVIEW .....                        | 4-1-1       |
| 4-1-4. CORRESPONDENCE REGARDING POLICY/PROCEDURES ..... | 4-1-1       |
| 4-1-5. IRREGULAR OPERATION .....                        | 4-1-1       |
| 4-1-6. PRELIMINARY ENVIRONMENTAL REVIEW .....           | 4-1-1       |

**Section 2. User Coordination/Conferences/Publicity**

|   |       |
|---|-------|
| 4-2-1. LOCAL CONFERENCES .....              | 4-2-1 |
| 4-2-2. PILOT EDUCATION .....                | 4-2-1 |
| 4-2-3. PUBLISHED ITEMS .....                | 4-2-1 |
| 4-2-4. COORDINATION OF ATC PROCEDURES ..... | 4-2-1 |

**Section 3. Letters of Agreement (LOA)**

|   |       |
|---|-------|
| 4-3-1. LETTERS OF AGREEMENT .....                 | 4-3-1 |
| 4-3-2. APPROPRIATE SUBJECTS .....                 | 4-3-2 |
| 4-3-3. DEVELOPING LOA .....                       | 4-3-2 |
| 4-3-4. REVIEW BY SERVICE AREA OFFICE .....        | 4-3-3 |
| 4-3-5. APPROVAL .....                             | 4-3-3 |
| 4-3-6. REVISIONS .....                            | 4-3-3 |
| 4-3-7. CANCELLATION .....                         | 4-3-4 |
| 4-3-8. AUTOMATED INFORMATION TRANSFER (AIT) ..... | 4-3-6 |

**Section 4. Application**

|   |       |
|---|-------|
| 4-4-1. OPERATIONS UNDER EXEMPTIONS FROM SECTION 3 OF APPENDIX D TO PART 91 SURFACE AREAS OF CLASS B AND CLASS C AIRSPACE WITHIN WHICH SPECIAL VFR WEATHER MINIMUMS ARE NOT AUTHORIZED FOR FIXED-WING AIRCRAFT ..... | 4-4-1 |
| 4-4-2. USE OF AIRCRAFT CALL SIGNS .....   | 4-4-1 |
| 4-4-3. RUNWAY SUPERVISORY UNITS (RSU) .....   | 4-4-1 |

**Section 5. Other Correspondence**

|   |       |
|---|-------|
| 4-5-1. LETTERS OF PROCEDURES .....                                  | 4-5-1 |
| 4-5-2. LETTERS TO AIRMEN .....                                      | 4-5-1 |
| 4-5-3. DISPOSITION OF VOLCANIC ACTIVITY REPORTING (VAR) FORMS ..... | 4-5-2 |

**Section 6. Records**

|  |       |
|--|-------|
| 4-6-1. FACILITY RECORDS MANAGEMENT .....                         | 4-6-1 |
| 4-6-2. COLLECTION OF OPERATIONAL DATA .....                      | 4-6-1 |
| 4-6-3. FORMS PREPARATION .....                                   | 4-6-1 |
| 4-6-4. FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION ..... | 4-6-1 |
| 4-6-5. PREPARATION OF FAA FORM 7230-4 .....                      | 4-6-1 |
| 4-6-6. FAA FORM 7230-10, POSITION LOG .....                      | 4-6-3 |
| 4-6-7. AUTOMATED POSITION SIGN ON/OFF .....                      | 4-6-5 |
| 4-6-8. TIME AND ATTENDANCE (T&A) RECORDING .....                 | 4-6-6 |

**Section 7. Reports**

|                                    |       |
|------------------------------------|-------|
| 4-7-1. MONTHLY REPORTS .....       | 4-7-1 |
| 4-7-2. DELAY REPORTING .....       | 4-7-1 |
| 4-7-3. SYSTEM IMPACT REPORTS ..... | 4-7-1 |

| <b>Paragraph</b>                                      | <b>Page</b> |
|---|-------------|
| 4-7-4. UNIDENTIFIED FLYING OBJECT (UFO) REPORTS ..... | 4-7-1       |

**Section 8. Freedom of Information Act (FOIA)**

|  |       |
|--|-------|
| 4-8-1. ACCIDENT/INCIDENT RECORDINGS .....                | 4-8-1 |
| 4-8-2. REQUESTS TO PRESERVE TAPE OR DAT UNDER FOIA ..... | 4-8-1 |
| 4-8-3. COMPUTER DATA .....                               | 4-8-1 |
| 4-8-4. FEES .....  | 4-8-1 |

**Chapter 5. Special Flight Handling**

**Section 1. Presidential Aircraft**

|  |       |
|--|-------|
| 5-1-1. ADVANCE COORDINATION .....                        | 5-1-1 |
| 5-1-2. MONITORING THE PRESIDENTIAL AIRCRAFT FLIGHT ..... | 5-1-2 |
| 5-1-3. USE OF FAA COMMUNICATIONS CIRCUITS .....          | 5-1-2 |
| 5-1-4. SECURITY OF INFORMATION .....                     | 5-1-2 |
| 5-1-5. MOVEMENT INFORMATION .....                        | 5-1-3 |
| 5-1-6. COORDINATION .....                                | 5-1-3 |
| 5-1-7. RESCUE SUPPORT AIRCRAFT .....                     | 5-1-3 |

**Section 2. FAA Aircraft**

|  |       |
|--|-------|
| 5-2-1. IDENTIFYING DEPARTMENT OF TRANSPORTATION (DOT) AND FAA<br>FLIGHTS ..... | 5-2-1 |
| 5-2-2. FLIGHT INSPECTION AIRCRAFT .....  | 5-2-1 |
| 5-2-3. HIGH ALTITUDE INSPECTIONS .....   | 5-2-1 |
| 5-2-4. RESEARCH AND DEVELOPMENT FLIGHTS .....                                  | 5-2-1 |

**Section 3. DOE and Other Aircraft**

|   |       |
|---|-------|
| 5-3-1. DEPARTMENT OF ENERGY (DOE) FLIGHTS .....                     | 5-3-1 |
| 5-3-2. IDENTIFICATION OF SPECIAL DOE FLIGHTS .....                  | 5-3-1 |
| 5-3-3. NOTIFICATION OF DOE REPORTED ACCIDENT/UNREPORTED AIRCRAFT .. | 5-3-1 |
| 5-3-4. ATMOSPHERE SAMPLING FOR NUCLEAR CONTAMINATION .....          | 5-3-1 |
| 5-3-5. DUE REGARD OPERATIONS .....                                  | 5-3-1 |
| 5-3-6. WEATHER RECONNAISSANCE FLIGHTS .....                         | 5-3-2 |
| 5-3-7. OPEN SKIES TREATY AIRCRAFT PRIORITY FLIGHTS (F and D) .....  | 5-3-3 |

**Section 4. Other Flight Requests**

|   |       |
|---|-------|
| 5-4-1. REQUESTS FOR DEVIATION FROM TRANSPONDER REQUIREMENTS ..... | 5-4-1 |
| 5-4-2. CROP DUSTER/ANTIQUE AIRCRAFT .....                         | 5-4-2 |
| 5-4-3. FLIGHT TEST OPERATIONS .....                               | 5-4-2 |
| 5-4-4. SANCTIONED SPEED RECORDS .....                             | 5-4-2 |
| 5-4-5. CERTIFYING RECORD ATTEMPTS .....                           | 5-4-2 |
| 5-4-6. PHOTOGRAMMETRIC FLIGHTS .....                              | 5-4-3 |
| 5-4-7. AEROBATIC PRACTICE AREAS .....                             | 5-4-3 |

**Part 2. AIR ROUTE TRAFFIC CONTROL CENTERS**

**Chapter 6. En Route Operations and Services**

**Section 1. General**

|                                 |       |
|---------------------------------|-------|
| 6-1-1. AREAS OF OPERATION ..... | 6-1-1 |
|---------------------------------|-------|

| <b>Paragraph</b>                            | <b>Page</b> |
|---|-------------|
| 6-1-2. SECTORS .....                        | 6-1-1       |
| 6-1-3. SECTOR CONFIGURATION .....           | 6-1-1       |
| 6-1-4. AREAS OF SPECIALIZATION .....        | 6-1-1       |
| 6-1-5. OPERATING POSITION DESIGNATORS ..... | 6-1-1       |
| 6-1-6. FLIGHT PROGRESS STRIP USAGE .....    | 6-1-2       |

**Section 2. Sector Information Binders**

|   |       |
|---|-------|
| 6-2-1. EN ROUTE CONTROLLER TEAM CONCEPT .....   | 6-2-1 |
| 6-2-2. EN ROUTE SECTOR INFORMATION BINDER ..... | 6-2-1 |

**Section 3. Operations**

|   |       |
|---|-------|
| 6-3-1. HANDLING OF SIGMETs, CWAs, AND PIREPs .....                  | 6-3-1 |
| 6-3-2. RECEIPT OF NOTAM DATA .....                                  | 6-3-1 |
| 6-3-3. DF NET CONTROL POSITION OPERATION .....                      | 6-3-1 |
| 6-3-4. REVIEW AIRSPACE STRUCTURE .....                              | 6-3-2 |
| 6-3-5. DATA COMMUNICATION .....                                     | 6-3-2 |
| 6-3-6. MTR (IR) AND CHANGES TO PUBLISHED MOA ACTIVITY SCHEDULES ... | 6-3-2 |

**Section 4. Services**

|   |       |
|---|-------|
| 6-4-1. ADVANCE APPROACH INFORMATION .....   | 6-4-1 |
| 6-4-2. MINIMUM IFR ALTITUDES (MIA) .....    | 6-4-1 |
| 6-4-3. SPECIAL USE FREQUENCIES .....        | 6-4-1 |
| 6-4-4. PRACTICE INSTRUMENT APPROACHES ..... | 6-4-1 |

**Section 5. Stored Flight Plan Program**

|   |       |
|---|-------|
| 6-5-1. CRITERIA .....                                       | 6-5-1 |
| 6-5-2. IMPLEMENTATION AND COORDINATION .....                | 6-5-2 |
| 6-5-3. PREPARATION AND MAINTENANCE OF BULK STORE FILE ..... | 6-5-2 |
| 6-5-4. REMARKS DATA .....                                   | 6-5-2 |

**Section 6. Air Carrier Computer Interface Program**

|   |       |
|---|-------|
| 6-6-1. GENERAL .....                    | 6-6-1 |
| 6-6-2. FACILITY RESPONSIBILITIES .....  | 6-6-1 |
| 6-6-3. CRITERIA FOR PARTICIPATION ..... | 6-6-1 |
| 6-6-4. FORMAT CONVENTIONS .....         | 6-6-1 |
| 6-6-5. MESSAGE CONTENT .....            | 6-6-1 |

**Section 7. User Request Evaluation Tool (URET)**

|   |       |
|---|-------|
| 6-7-1. GENERAL .....  | 6-7-1 |
| 6-7-2. FRONT-LINE MANAGER-IN-CHARGE RESPONSIBILITIES .....    | 6-7-1 |
| 6-7-3. OPERATIONS MANAGER-IN-CHARGE RESPONSIBILITIES .....    | 6-7-1 |
| 6-7-4. FACILITY MANAGER RESPONSIBILITIES .....                | 6-7-1 |
| 6-7-5. URET AIRSPACE CONFIGURATION ELEMENTS .....             | 6-7-2 |
| 6-7-6. STANDARD USE OF AUTOMATED FLIGHT DATA MANAGEMENT ..... | 6-7-2 |
| 6-7-7. URET OUTAGES .....                                     | 6-7-2 |
| 6-7-8. TRANSITION AND TRAINING PLANNING .....                 | 6-7-3 |
| 6-7-9. RESTRICTIONS INVENTORY AND EVALUATION .....            | 6-7-3 |
| 6-7-10. TRAFFIC COUNTS AND DELAY REPORTING .....              | 6-7-3 |

| <b>Paragraph</b>                                      | <b>Page</b> |
|---|-------------|
| 6-7-11. COMPUTER DATA RETENTION .....                 | 6-7-4       |
| 6-7-12. WAIVER TO INTERIM ALTITUDE REQUIREMENTS ..... | 6-7-4       |
| 6-7-13. TRANSFER OF POSITION RESPONSIBILITY .....     | 6-7-4       |

**Section 8. Ocean21**

|  |       |
|--|-------|
| 6-8-1. GENERAL .....   | 6-8-1 |
| 6-8-2. OPERATIONAL SUPERVISOR-IN-CHARGE RESPONSIBILITIES ..... | 6-8-1 |
| 6-8-3. ERROR REPAIR POSITION RESPONSIBILITIES .....            | 6-8-1 |
| 6-8-4. FACILITY MANAGER RESPONSIBILITIES .....                 | 6-8-1 |
| 6-8-5. TRANSFER OF POSITION .....                              | 6-8-2 |
| 6-8-6. OCEAN21 CHANNEL CHANGEOVERS .....                       | 6-8-2 |
| 6-8-7. OUTAGES .....   | 6-8-2 |
| 6-8-8. CONTROLLER PILOT DATA LINK COMMUNICATIONS .....         | 6-8-2 |

**Section 9. Reduced Vertical Separation Minimum (RVSM)**

|  |       |
|--|-------|
| 6-9-1. GENERAL .....   | 6-9-1 |
| 6-9-2. FACILITY MANAGER RESPONSIBILITIES .....                                     | 6-9-1 |
| 6-9-3. OPERATIONS MANAGER-IN-CHARGE RESPONSIBILITIES .....                         | 6-9-1 |
| 6-9-4. FRONT-LINE MANAGER-IN-CHARGE/CONTROLLER-IN-CHARGE<br>RESPONSIBILITIES ..... | 6-9-2 |
| 6-9-5. NON-RVSM REQUIREMENTS .....   | 6-9-2 |
| 6-9-6. EQUIPMENT SUFFIX AND DISPLAY MANAGEMENT .....                               | 6-9-2 |
| 6-9-7. MOUNTAIN WAVE ACTIVITY (MWA) .....  | 6-9-2 |
| 6-9-8. WAKE TURBULENCE AND WEATHER RELATED TURBULENCE .....                        | 6-9-2 |
| 6-9-9. SUSPENSION OF RVSM .....  | 6-9-3 |

**Chapter 7. En Route Data**

**Section 1. Performance Checks**

|  |       |
|--|-------|
| 7-1-1. RADAR PERFORMANCE CHECKS .....      | 7-1-1 |
| 7-1-2. SPECIAL RADAR ACCURACY CHECKS ..... | 7-1-1 |

**Section 2. Deficiencies**

|  |       |
|--|-------|
| 7-2-1. DEFICIENCIES IN SYSTEM .....                    | 7-2-1 |
| 7-2-2. AMPLITRON OR PARAMETRIC AMPLIFIER FAILURE ..... | 7-2-1 |
| 7-2-3. ELECTRONIC ATTACK (EA) .....                    | 7-2-1 |

**Chapter 8. NAS En Route Automation**

**Section 1. General**

|   |       |
|---|-------|
| 8-1-1. TRANSITION PROCEDURES .....        | 8-1-1 |
| 8-1-2. ALTRV FLIGHT DATA PROCESSING ..... | 8-1-1 |
| 8-1-3. COMPUTER DATA RETENTION .....      | 8-1-2 |

**Section 2. Procedures**

|  |       |
|--|-------|
| 8-2-1. SINGLE SITE COVERAGE STAGE A OPERATIONS ..... | 8-2-1 |
| 8-2-2. ADAPTED ALTIMETER SETTINGS .....              | 8-2-1 |

| <b>Paragraph</b>                                       | <b>Page</b> |
|--|-------------|
| 8-2-3. ADAPTATION OF EXTERNAL ALTIMETER SETTINGS ..... | 8-2-1       |
| 8-2-4. CONFLICT ALERT FUNCTION PARAMETERS .....        | 8-2-1       |
| 8-2-5. MODE C INTRUDER (MCI) ALERT PARAMETERS .....    | 8-2-1       |
| 8-2-6. E-MSAW ADAPTATION .....                         | 8-2-1       |
| 8-2-7. WAIVER TO INTERIM ALTITUDE REQUIREMENTS .....   | 8-2-2       |

**Section 3. Displays**

|  |       |
|--|-------|
| 8-3-1. DIGITAL MAP VERIFICATION .....                | 8-3-1 |
| 8-3-2. DATA DISPLAY FOR BLOCK ALTITUDE FLIGHTS ..... | 8-3-1 |
| 8-3-3. SELECTED ALTITUDE LIMITS .....                | 8-3-1 |
| 8-3-4. AUTOMATED WEATHER DISPLAY STATUS .....        | 8-3-1 |

**Chapter 9. Facility Statistical Data, Reports, and Forms**

**Section 1. Operational Count Data**

|   |       |
|---|-------|
| 9-1-1. IFR AIRCRAFT HANDLED .....                             | 9-1-1 |
| 9-1-2. CATEGORIES OF OPERATIONS .....                         | 9-1-1 |
| 9-1-3. CRITERIA FOR IFR AIRCRAFT HANDLED COUNT .....          | 9-1-1 |
| 9-1-4. MILITARY AIRCRAFT MOVEMENTS .....                      | 9-1-2 |
| 9-1-5. USE OF AUTOMATED COUNTS .....                          | 9-1-3 |
| 9-1-6. FAA FORM 7230-14, ARTCC OPERATIONS DAILY SUMMARY ..... | 9-1-3 |
| 9-1-7. INSTRUCTIONS FOR COMPLETING FAA FORM 7230-14 .....     | 9-1-3 |
| 9-1-8. DISTRIBUTION AND AMENDMENT .....                       | 9-1-4 |

**Section 2. Instrument Approach Data**

|   |       |
|---|-------|
| 9-2-1. GENERAL .....  | 9-2-1 |
| 9-2-2. INSTRUMENT APPROACHES .....                                | 9-2-1 |
| 9-2-3. AIRPORTS REPORTED .....                                    | 9-2-1 |
| 9-2-4. FAA FORM 7230-16, APPROACH DATA WORKSHEET .....            | 9-2-1 |
| 9-2-5. FAA FORM 7230-12, INSTRUMENT APPROACHES MONTHLY SUMMARY .. | 9-2-1 |
| 9-2-6. DISTRIBUTION AND AMENDMENT .....                           | 9-2-2 |
| 9-2-7. FORWARD COPY TO ADJACENT SERVICE AREA .....                | 9-2-2 |

**Section 3. Other Reports and Forms**

|  |       |
|--|-------|
| 9-3-1. FAA FORM 7210-8, ELT INCIDENT ..... | 9-3-1 |
|--|-------|

**Part 3. TERMINAL AIR TRAFFIC CONTROL FACILITIES**

**Chapter 10. Terminal Operations, Services, and Equipment**

**Section 1. General**

|   |        |
|---|--------|
| 10-1-1. OPERATING POSITION DESIGNATORS .....                  | 10-1-1 |
| 10-1-2. TOWER/RADAR TEAM CONCEPTS .....                       | 10-1-1 |
| 10-1-3. MILITARY ATC BOARDS .....                             | 10-1-1 |
| 10-1-4. SECTIONAL AERONAUTICAL AND TERMINAL AREA CHARTS ..... | 10-1-1 |
| 10-1-5. AREAS OF NONVISIBILITY .....                          | 10-1-2 |



| <b>Paragraph</b>  | <b>Page</b> |
|---|-------------|
| 10-1-6. SELECTING ACTIVE RUNWAYS .....                            | 10-1-2      |
| 10-1-7. USE OF ACTIVE RUNWAYS .....                               | 10-1-2      |
| 10-1-8. FLIGHT PROGRESS STRIP USAGE .....                         | 10-1-4      |
| 10-1-9. LOW VISIBILITY OPERATIONS .....                           | 10-1-4      |
| 10-1-10. MOBILE CONTROL TOWERS .....                              | 10-1-4      |
| 10-1-11. PARTICIPATION IN LOCAL AIRPORT DEICING PLAN (LADP) ..... | 10-1-4      |
| 10-1-12. PRECISION OBSTACLE FREE ZONE (POFZ) .....                | 10-1-6      |

## **Section 2. Position Binders**

|  |        |
|--|--------|
| 10-2-1. POSITION DUTIES AND RESPONSIBILITIES ..... | 10-2-1 |
| 10-2-2. TOWER/RADAR TEAM POSITION BINDERS .....    | 10-2-1 |

## **Section 3. Operations**

|   |        |
|---|--------|
| 10-3-1. SIGMET AND PIREP HANDLING .....                         | 10-3-1 |
| 10-3-2. WIND INSTRUMENTS AT APPROACH CONTROL FACILITIES .....   | 10-3-1 |
| 10-3-3. LOW LEVEL WIND SHEAR/MICROBURST DETECTION SYSTEMS ..... | 10-3-1 |
| 10-3-4. RELAY OF RVV/RVR VALUES .....                           | 10-3-2 |
| 10-3-5. ADVANCE APPROACH INFORMATION .....                      | 10-3-2 |
| 10-3-6. ILS/MLS HEIGHT/DISTANCE LIMITATIONS .....               | 10-3-2 |
| 10-3-7. LAND AND HOLD SHORT OPERATIONS (LAHSO) .....            | 10-3-2 |
| 10-3-8. LINE UP AND WAIT (LUAW) OPERATIONS .....                | 10-3-3 |
| 10-3-9. TAKEOFF CLEARANCE .....                                 | 10-3-4 |
| 10-3-10. MULTIPLE RUNWAY CROSSINGS .....                        | 10-3-4 |

## **Section 4. Services**

|  |        |
|--|--------|
| 10-4-1. AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS) .....                      | 10-4-1 |
| 10-4-2. PRETAXI CLEARANCE PROCEDURES .....                                       | 10-4-1 |
| 10-4-3. GATE HOLD PROCEDURES .....   | 10-4-2 |
| 10-4-4. ADVISORY SERVICE TO ARRIVING VFR FLIGHTS .....                           | 10-4-2 |
| 10-4-5. PRACTICE INSTRUMENT APPROACHES .....                                     | 10-4-2 |
| 10-4-6. SIMULTANEOUS ILS/MLS APPROACHES .....                                    | 10-4-3 |
| 10-4-7. PRECISION RUNWAY MONITOR-SIMULTANEOUS OFFSET INSTRUMENT APPROACHES ..... | 10-4-4 |
| 10-4-8. REDUCED SEPARATION ON FINAL .....  | 10-4-5 |
| 10-4-9. MINIMUM IFR ALTITUDES (MIA) .....  | 10-4-6 |

## **Section 5. Terminal Radar**

|   |        |
|---|--------|
| 10-5-1. SHUTDOWN OF PAR ANTENNAS .....                          | 10-5-1 |
| 10-5-2. RADAR DISPLAY INDICATORS .....                          | 10-5-1 |
| 10-5-3. FUNCTIONAL USE OF CERTIFIED TOWER RADAR DISPLAYS .....  | 10-5-1 |
| 10-5-4. ASR PERFORMANCE CHECKS .....                            | 10-5-2 |
| 10-5-5. DEFICIENCIES IN SYSTEM .....                            | 10-5-2 |
| 10-5-6. RADAR TOLERANCES .....                                  | 10-5-2 |
| 10-5-7. RECOMMENDED ALTITUDES FOR SURVEILLANCE APPROACHES ..... | 10-5-3 |
| 10-5-8. ASDE PERFORMANCE CHECKS .....                           | 10-5-3 |

## **Section 6. Airport Lighting**

|  |        |
|--|--------|
| 10-6-1. GENERAL .....                                  | 10-6-1 |
| 10-6-2. OPERATION OF LIGHTS WHEN TOWER IS CLOSED ..... | 10-6-1 |

| <b>Paragraph</b>   | <b>Page</b> |
|--|-------------|
| 10-6-3. INCOMPATIBLE LIGHT SYSTEM OPERATION .....  | 10-6-1      |
| 10-6-4. APPROACH LIGHT SYSTEMS .....   | 10-6-2      |
| 10-6-5. VISUAL APPROACH SLOPE INDICATOR (VASI) SYSTEMS .....   | 10-6-3      |
| 10-6-6. PRECISION APPROACH PATH INDICATOR (PAPI) SYSTEMS .....   | 10-6-3      |
| 10-6-7. RUNWAY AND TAXIWAY LIGHTS .....  | 10-6-4      |
| 10-6-8. RUNWAY FLOODLIGHTS .....   | 10-6-4      |
| 10-6-9. RUNWAY EDGE LIGHTS ASSOCIATED WITH MEDIUM APPROACH LIGHT<br>SYSTEM/RUNWAY ALIGNMENT INDICATOR LIGHTS ..... | 10-6-4      |

**Section 7. Airport Arrival Rate (AAR)**

|                                |        |
|--------------------------------|--------|
| 10-7-1. PURPOSE .....          | 10-7-1 |
| 10-7-2. POLICY .....           | 10-7-1 |
| 10-7-3. DEFINITIONS .....      | 10-7-1 |
| 10-7-4. RESPONSIBILITIES ..... | 10-7-1 |
| 10-7-5. CALCULATING AARs ..... | 10-7-1 |
| 10-7-6. OPERATIONAL AARs ..... | 10-7-2 |

**Chapter 11. National Programs**

**Section 1. Terminal VFR Radar Services**

|                                |        |
|--------------------------------|--------|
| 11-1-1. PROGRAM INTENT .....   | 11-1-1 |
| 11-1-2. IMPLEMENTATION .....   | 11-1-1 |
| 11-1-3. TRSA .....             | 11-1-2 |
| 11-1-4. CLASS C AIRSPACE ..... | 11-1-2 |
| 11-1-5. CLASS B AIRSPACE ..... | 11-1-3 |

**Section 2. Automated Terminal Tracking Systems (ATTS)**

|   |        |
|---|--------|
| 11-2-1. OPERATIONAL USE .....   | 11-2-1 |
| 11-2-2. DATA ENTRIES .....  | 11-2-1 |
| 11-2-3. DISPLAY DATA .....  | 11-2-1 |
| 11-2-4. USE OF MODIFY AND QUICK LOOK FUNCTIONS .....  | 11-2-1 |
| 11-2-5. AUTOMATION PROGRAM CHANGES .....  | 11-2-2 |
| 11-2-6. AUTOMATIC ACQUISITION/TERMINATION AREAS .....   | 11-2-2 |
| 11-2-7. MINIMUM SAFE ALTITUDE WARNING (MSAW), CONFLICT ALERT (CA),<br>AND MODE C INTRUDER (MCI) ..... | 11-2-2 |
| 11-2-8. MAGNETIC VARIATION OF VIDEO MAPS/GEO MAPS AT ARTS FACILITIES                                  | 11-2-3 |
| 11-2-9. MSAW DTM CARTOGRAPHIC CERTIFICATION, UPDATES, AND<br>RECOMPILATION .....                      | 11-2-3 |
| 11-2-10. DIGITAL MAP VERIFICATION .....   | 11-2-4 |

**Section 3. Data Recording and Retention**

|                              |        |
|------------------------------|--------|
| 11-3-1. DATA RECORDING ..... | 11-3-1 |
| 11-3-2. DATA RETENTION ..... | 11-3-1 |
| 11-3-3. FAULT LOG .....      | 11-3-2 |

**Section 4. TPX-42**

|  |        |
|--|--------|
| 11-4-1. OPERATIONAL USE .....                  | 11-4-1 |
| 11-4-2. LOW ALTITUDE ALERT SYSTEM (LAAS) ..... | 11-4-1 |

**Section 5. Charted VFR Flyway Planning Chart Program**

|                          |        |
|--------------------------|--------|
| 11-5-1. DEFINITION ..... | 11-5-1 |
|--------------------------|--------|

| <b>Paragraph</b>               | <b>Page</b> |
|--------------------------------|-------------|
| 11-5-2. CRITERIA .....         | 11-5-1      |
| 11-5-3. RESPONSIBILITIES ..... | 11-5-1      |

**Section 6. Helicopter Route Chart Program**

|                                |        |
|--------------------------------|--------|
| 11-6-1. POLICY .....           | 11-6-1 |
| 11-6-2. DEFINITION .....       | 11-6-1 |
| 11-6-3. CRITERIA .....         | 11-6-1 |
| 11-6-4. RESPONSIBILITIES ..... | 11-6-2 |

**Section 7. Terminal Area VFR Route Program**

|                                |        |
|--------------------------------|--------|
| 11-7-1. POLICY .....           | 11-7-1 |
| 11-7-2. DEFINITION .....       | 11-7-1 |
| 11-7-3. CRITERIA .....         | 11-7-1 |
| 11-7-4. RESPONSIBILITIES ..... | 11-7-1 |

**Section 8. Standard Terminal Automation Replacement System (STARS)**

|   |        |
|---|--------|
| 11-8-1. OPERATIONAL USE .....   | 11-8-1 |
| 11-8-2. DATA ENTRIES .....  | 11-8-1 |
| 11-8-3. DISPLAY DATA .....  | 11-8-1 |
| 11-8-4. USE OF STARS QUICK LOOK FUNCTIONS .....                               | 11-8-1 |
| 11-8-5. AUTOMATION PROGRAM CHANGES .....                                      | 11-8-1 |
| 11-8-6. AUTOMATIC ACQUISITION/TERMINATION AREAS .....                         | 11-8-2 |
| 11-8-7. MINIMUM SAFE ALTITUDE WARNING (MSAW) AND CONFLICT ALERT (CA) .....    | 11-8-2 |
| 11-8-8. MAGNETIC VARIATION OF VIDEO MAPS/GEO MAPS AT STARS FACILITIES .....   | 11-8-3 |
| 11-8-9. MSAW DTM CARTOGRAPHIC CERTIFICATION, UPDATES, AND RECOMPILATION ..... | 11-8-3 |
| 11-8-10. DIGITAL MAP VERIFICATION .....                                       | 11-8-3 |
| 11-8-11. MODE C INTRUDER (MCI) ALERT PARAMETERS .....                         | 11-8-3 |
| 11-8-12. OPERATIONAL MODE TRANSITION PROCEDURES .....                         | 11-8-4 |
| 11-8-13. RADAR SELECTION PROCEDURES .....                                     | 11-8-4 |
| 11-8-14. MULTI-SENSOR RADAR OPERATIONS .....                                  | 11-8-5 |
| 11-8-15. SINGLE SITE COVERAGE ATTS OPERATIONS .....                           | 11-8-5 |

**Section 9. Safety Logic Systems Front-Line Manager/CIC Procedures**

|   |        |
|---|--------|
| 11-9-1. SYSTEM OPERATION .....                            | 11-9-1 |
| 11-9-2. ENSURE STATUS .....                               | 11-9-1 |
| 11-9-3. MONITOR ALERTS AND ENSURE CORRECTIVE ACTION ..... | 11-9-2 |
| 11-9-4. RAIN CONFIGURATION .....                          | 11-9-2 |
| 11-9-5. LIMITED CONFIGURATION .....                       | 11-9-2 |
| 11-9-6. WATCH CHECKLIST .....                             | 11-9-2 |

**Section 10. VFR Waypoint Chart Program**

|                                 |         |
|---------------------------------|---------|
| 11-10-1. POLICY .....           | 11-10-1 |
| 11-10-2. DEFINITION .....       | 11-10-1 |
| 11-10-3. CRITERIA .....         | 11-10-1 |
| 11-10-4. RESPONSIBILITIES ..... | 11-10-2 |

**Chapter 12. Facility Statistical Data, Reports, and Forms**

**Section 1. General Information**

|                       |        |
|-----------------------|--------|
| 12-1-1. GENERAL ..... | 12-1-1 |
|-----------------------|--------|

| <b>Paragraph</b>                                       | <b>Page</b> |
|--|-------------|
| 12-1-2. COUNTING METHODS .....                         | 12-1-1      |
| 12-1-3. QUESTIONS OR CHANGES .....                     | 12-1-1      |
| 12-1-4. SUMMARY OF STATISTICAL REPORTS AND FORMS ..... | 12-1-1      |
| 12-1-5. CATEGORIES OF OPERATIONS .....                 | 12-1-2      |

**Section 2. Itinerant Operations**

|                          |        |
|--------------------------|--------|
| 12-2-1. TABULATION ..... | 12-2-1 |
|--------------------------|--------|

**Section 3. Local Operations**

|                          |        |
|--------------------------|--------|
| 12-3-1. TABULATION ..... | 12-3-1 |
|--------------------------|--------|

**Section 4. Overflight Operations**

|                          |        |
|--------------------------|--------|
| 12-4-1. TABULATION ..... | 12-4-1 |
|--------------------------|--------|

**Section 5. Amending and Reviewing Data**

|                                   |        |
|-----------------------------------|--------|
| 12-5-1. AMENDED OPSNET DATA ..... | 12-5-1 |
| 12-5-2. ANALYSIS AND REVIEW ..... | 12-5-1 |

**Part 4. FLIGHT SERVICE STATIONS**

**Chapter 13. Flight Service Operations and Services**

**Section 1. General**

|  |        |
|--|--------|
| 13-1-1. OPERATING POSITION DESIGNATORS ..... | 13-1-1 |
| 13-1-2. TEMPORARY FSS .....                  | 13-1-1 |
| 13-1-3. FLIGHT PLAN AREA .....               | 13-1-1 |
| 13-1-4. ICSS INTRODUCTORY ANNOUNCEMENT ..... | 13-1-1 |

**Section 2. Position/Service Information Binders**

|                                  |        |
|----------------------------------|--------|
| 13-2-1. RESPONSIBILITY .....     | 13-2-1 |
| 13-2-2. BOUNDARIES .....         | 13-2-1 |
| 13-2-3. POSITIONS/SERVICES ..... | 13-2-1 |

**Section 3. Operations**

|   |        |
|---|--------|
| 13-3-1. AIRPORT CONDITION FILE .....      | 13-3-1 |
| 13-3-2. LANDING AREA STATUS CHECKS .....  | 13-3-1 |
| 13-3-3. AIRPORT SEARCH ARRANGEMENTS ..... | 13-3-1 |
| 13-3-4. LIAISON VISITS .....              | 13-3-1 |
| 13-3-5. DUTIES .....                      | 13-3-1 |
| 13-3-6. TIE-IN NOTAM RESPONSIBILITY ..... | 13-3-1 |

**Section 4. Services**

|  |        |
|--|--------|
| 13-4-1. PREFILED FLIGHT PLANS .....  | 13-4-1 |
| 13-4-2. PRACTICE INSTRUMENT APPROACHES .....   | 13-4-1 |
| 13-4-3. OPERATION OF AIRPORT LIGHTS .....  | 13-4-1 |
| 13-4-4. RUNWAY EDGE LIGHTS ASSOCIATED WITH MEDIUM APPROACH LIGHT<br>SYSTEM/RUNWAY ALIGNMENT INDICATOR LIGHTS ..... | 13-4-1 |

| <b>Paragraph</b>   | <b>Page</b> |
|--|-------------|
| 13-4-5. LOCAL AIRPORT ADVISORY (LAA)/REMOTE AIRPORT ADVISORY (RAA)/<br>REMOTE AIRPORT INFORMATION SERVICE (RAIS) ..... | 13-4-1      |
| 13-4-6. AUTOMATIC FLIGHT INFORMATION SERVICE (AFIS) - ALASKA FSSs ONLY   | 13-4-2      |
| 13-4-7. TRANSMISSION OF MESSAGES FROM AIRPORT INSPECTORS .....   | 13-4-3      |

## **Chapter 14. Aviation Meteorological Services and Equipment**

### **Section 1. General**

|   |        |
|---|--------|
| 14-1-1. FAA-NWS AGREEMENT .....               | 14-1-1 |
| 14-1-2. CERTIFICATES OF AUTHORITY .....       | 14-1-1 |
| 14-1-3. LIAISON WITH AVIATION INTERESTS ..... | 14-1-1 |
| 14-1-4. TELEPHONE LISTINGS .....              | 14-1-1 |
| 14-1-5. MINIMUM WEATHER EQUIPMENT .....       | 14-1-1 |
| 14-1-6. SUPPLY-SUPPORT .....                  | 14-1-2 |
| 14-1-7. NWS OPERATIONS MANUAL .....           | 14-1-2 |

### **Section 2. Pilot Weather Briefing**

|  |        |
|--|--------|
| 14-2-1. BRIEFING RESPONSIBILITY .....        | 14-2-1 |
| 14-2-2. WEATHER CHART DISPLAY .....          | 14-2-1 |
| 14-2-3. TELEVISION EQUIPMENT .....           | 14-2-1 |
| 14-2-4. AFSS/FSS-WSO/WFO ADJOINING .....     | 14-2-1 |
| 14-2-5. AFSS/FSS-WSO/WFO NOT ADJOINING ..... | 14-2-1 |
| 14-2-6. FLIGHT PLANNING DISPLAY .....        | 14-2-1 |
| 14-2-7. FLIGHT PLANNING FORMS .....          | 14-2-1 |
| 14-2-8. MILITARY TRAINING ACTIVITY .....     | 14-2-1 |
| 14-2-9. TRANSFER OF BRIEFERS .....           | 14-2-2 |

### **Section 3. En Route Flight Advisory Service (EFAS)**

|  |        |
|--|--------|
| 14-3-1. GENERAL .....                                | 14-3-1 |
| 14-3-2. FLIGHT WATCH AREA (FWA) .....                | 14-3-1 |
| 14-3-3. SYSTEM CONFIGURATION .....                   | 14-3-1 |
| 14-3-4. HOURS OF OPERATION .....                     | 14-3-1 |
| 14-3-5. STAFFING .....                               | 14-3-1 |
| 14-3-6. NATIONAL WEATHER SERVICE (NWS) SUPPORT ..... | 14-3-1 |
| 14-3-7. EQUIPMENT .....                              | 14-3-2 |
| 14-3-8. TRAINING .....                               | 14-3-2 |
| 14-3-9. CERTIFICATION .....                          | 14-3-2 |
| 14-3-10. RECERTIFICATION REQUIREMENTS .....          | 14-3-2 |
| 14-3-11. QUALIFICATION AND SELECTION .....           | 14-3-3 |

### **Section 4. Broadcasts**

|  |        |
|--|--------|
| 14-4-1. STATION BROADCASTS .....   | 14-4-1 |
| 14-4-2. COORDINATE WITH WEATHER FORECAST OFFICE (WFO)<br>(ALASKA ONLY) ..... | 14-4-1 |
| 14-4-3. COMMERCIAL BROADCAST STATIONS .....                                  | 14-4-1 |
| 14-4-4. REDUCING RECORDED WEATHER INFORMATION SERVICES .....                 | 14-4-1 |

## **Chapter 15. Equipment**

### **Section 1. General**

|                              |        |
|------------------------------|--------|
| 15-1-1. RESPONSIBILITY ..... | 15-1-1 |
|------------------------------|--------|

| <b>Paragraph</b>                                  | <b>Page</b> |
|---|-------------|
| 15-1-2. AIRCRAFT ORIENTATION PLOTTING BOARD ..... | 15-1-1      |
| 15-1-3. ADDITIONAL TELEPHONE SERVICE .....        | 15-1-1      |
| 15-1-4. ORDERING OVERLAYS .....                   | 15-1-1      |
| 15-1-5. LEASED EQUIPMENT SUPPLIES .....           | 15-1-1      |

**Section 2. Frequencies**

|   |        |
|---|--------|
| 15-2-1. VOR AND VORTAC VOICE CHANNELS ..... | 15-2-1 |
| 15-2-2. UHF EN ROUTE CHANNEL .....          | 15-2-1 |

**Chapter 16. Facility Statistical Data, Reports, and Forms**

**Section 1. General Information**

|   |        |
|---|--------|
| 16-1-1. FORM USAGE .....                    | 16-1-1 |
| 16-1-2. TOTAL FLIGHT SERVICES FORMULA ..... | 16-1-1 |

**Section 2. Aircraft Contacted**

|  |        |
|--|--------|
| 16-2-1. AIRCRAFT CONTACTED .....   | 16-2-1 |
| 16-2-2. LOCAL AIRPORT ADVISORY (LAA)/REMOTE AIRPORT ADVISORY (RAA)/<br>REMOTE AIRPORT INFORMATION SERVICE (RAIS) ..... | 16-2-1 |
| 16-2-3. RADIO CONTACTS .....   | 16-2-1 |

**Section 3. Flight Plan Count**

|   |        |
|---|--------|
| 16-3-1. FLIGHT PLAN COUNT .....           | 16-3-1 |
| 16-3-2. ADDITIONAL ITEMS .....            | 16-3-1 |
| 16-3-3. FLIGHT PLAN CHANGE EN ROUTE ..... | 16-3-1 |
| 16-3-4. FLIGHT PLAN FORMS .....           | 16-3-1 |

**Section 4. Pilot Briefing Count**

|  |        |
|--|--------|
| 16-4-1. PILOT BRIEFING COUNT .....                                     | 16-4-1 |
| 16-4-2. RETENTION OF FORMS CONTAINING PILOT BRIEFING ("PB") DATA ..... | 16-4-1 |

**Section 5. Other Reports and Information**

|  |        |
|--|--------|
| 16-5-1. COMPLETION OF MONTHLY ACTIVITY RECORD .....  | 16-5-1 |
| 16-5-2. EFAS MONTHLY REPORT .....                    | 16-5-1 |
| 16-5-3. DISTRIBUTION AND AMENDMENT .....             | 16-5-1 |
| 16-5-4. MESSAGE TRAFFIC NUMBER RECORD .....          | 16-5-2 |
| 16-5-5. UNANNOUNCED MILITARY AIRCRAFT ARRIVALS ..... | 16-5-2 |

**Section 6. AFSS Printing of Lists and Tallies  
(Model 1 Full Capacity)**

|   |        |
|---|--------|
| 16-6-1. PRINTING OF LISTS .....                               | 16-6-1 |
| 16-6-2. PRINTING OF TRANSACTIONS INVOLVING LIST UPDATES ..... | 16-6-1 |
| 16-6-3. FLIGHT PLAN LOG PRINTING .....                        | 16-6-1 |
| 16-6-4. PREFLIGHT BRIEFING LOG PRINTING .....                 | 16-6-1 |
| 16-6-5. IN-FLIGHT CONTACT LOG PRINTING .....                  | 16-6-2 |
| 16-6-6. TALLIES PRINTING .....                                | 16-6-2 |
| 16-6-7. FLIGHT PLAN PRINTING .....                            | 16-6-2 |
| 16-6-8. DISABLED SYSTEM COMPONENT PRINTING .....              | 16-6-2 |

## Section 7. AFSS Lists, Logs, and Tallies (OASIS)

| <b>Paragraph</b>                              | <b>Page</b> |
|---|-------------|
| 16-7-1. RECORDING OF FLIGHT INFORMATION ..... | 16-7-1      |
| 16-7-2. MANAGEMENT OF LISTS AND LOGS .....    | 16-7-1      |
| 16-7-3. TALLIES PRINTING .....                | 16-7-1      |

## Part 5. TRAFFIC MANAGEMENT SYSTEM

### Chapter 17. Traffic Management National, Center, and Terminal

#### Section 1. Organizational Missions

|  |        |
|--|--------|
| 17-1-1. TRAFFIC MANAGEMENT SYSTEM MISSION .....                                  | 17-1-1 |
| 17-1-2. DAVID J. HURLEY AIR TRAFFIC CONTROL SYSTEM COMMAND CENTER (ATCSCC) ..... | 17-1-1 |
| 17-1-3. TRAFFIC MANAGEMENT UNIT (TMU) MISSION .....                              | 17-1-1 |

#### Section 2. Organizational Responsibilities

|   |        |
|---|--------|
| 17-2-1. AIR TRAFFIC TACTICAL OPERATIONS PROGRAM ..... | 17-2-1 |
| 17-2-2. SERVICE CENTER OPERATIONS SUPPORT GROUP ..... | 17-2-1 |
| 17-2-3. ATCSCC .....                                  | 17-2-1 |
| 17-2-4. FIELD FACILITIES .....                        | 17-2-2 |

#### Section 3. Line of Authority

|                        |        |
|------------------------|--------|
| 17-3-1. ATCSCC .....   | 17-3-1 |
| 17-3-2. ARTCC .....    | 17-3-1 |
| 17-3-3. TERMINAL ..... | 17-3-1 |

#### Section 4. Supplemental Duties

|   |        |
|---|--------|
| 17-4-1. TELEPHONE CONFERENCES .....           | 17-4-1 |
| 17-4-2. SPECIAL INTEREST FLIGHTS .....        | 17-4-1 |
| 17-4-3. ANALYSIS .....                        | 17-4-1 |
| 17-4-4. OPERATIONS MANAGER (OM) SUPPORT ..... | 17-4-2 |
| 17-4-5. DIVERSION RECOVERY .....              | 17-4-2 |

#### Section 5. Coordination

|   |        |
|---|--------|
| 17-5-1. COORDINATION .....  | 17-5-1 |
| 17-5-2. COMMUNICATION .....   | 17-5-1 |
| 17-5-3. DOCUMENTATION .....   | 17-5-1 |
| 17-5-4. RESPONSIBILITIES .....  | 17-5-1 |
| 17-5-5. STATIC COORDINATION .....   | 17-5-3 |
| 17-5-6. EN ROUTE INTRA-FACILITY COORDINATION .....  | 17-5-4 |
| 17-5-7. TERMINAL INTER-FACILITY COORDINATION .....  | 17-5-4 |
| 17-5-8. NATIONAL TRAFFIC MANAGEMENT LOG (NTML) .....                                      | 17-5-4 |
| 17-5-9. NTML FACILITY CONFIGURATION REQUIREMENTS .....                                    | 17-5-5 |
| 17-5-10. NTML PROCEDURES .....  | 17-5-5 |
| 17-5-11. PROCESSING REQUESTS FOR REROUTES AND RESTRICTIONS FOR FACILITIES WITH NTML ..... | 17-5-5 |

| <b>Paragraph</b>                                | <b>Page</b> |
|---|-------------|
| 17-5-12. DELAY REPORTING .....                  | 17-5-6      |
| 17-5-13. ELECTRONIC SYSTEM IMPACT REPORTS ..... | 17-5-6      |

**Section 6. Traffic Management Initiatives**

|   |        |
|---|--------|
| 17-6-1. GENERAL .....   | 17-6-1 |
| 17-6-2. BACKGROUND .....  | 17-6-1 |
| 17-6-3. POLICY .....  | 17-6-1 |
| 17-6-4. TYPES OF TMIs .....                                     | 17-6-1 |
| 17-6-5. EXCEPTION .....   | 17-6-2 |
| 17-6-6. TMI DATA .....  | 17-6-2 |
| 17-6-7. TMI APPROVAL AUTHORITY .....                            | 17-6-2 |
| 17-6-8. PROCESSING TMI .....                                    | 17-6-2 |
| 17-6-9. FIELD FACILITY RESPONSIBILITIES FOR TMIs .....          | 17-6-2 |
| 17-6-10. ATCSCC RESPONSIBILITIES FOR TMI .....                  | 17-6-3 |
| 17-6-11. TMIs WITHIN ARTCC AREA OF JURISDICTION .....           | 17-6-3 |
| 17-6-12. TMIs OF 10 MIT OR LESS .....                           | 17-6-3 |
| 17-6-13. EN ROUTE SEQUENCING PROGRAM (ESP) IMPLEMENTATION ..... | 17-6-3 |
| 17-6-14. TMIs OF 25 MIT OR GREATER .....                        | 17-6-4 |
| 17-6-15. CAPPING AND TUNNELING .....                            | 17-6-4 |

**Section 7. Flow Evaluation Area (FEA) and Flow Constrained Area (FCA)**

|   |        |
|---|--------|
| 17-7-1. GENERAL .....                     | 17-7-1 |
| 17-7-2. DEFINITIONS .....                 | 17-7-1 |
| 17-7-3. RESPONSIBILITIES .....            | 17-7-1 |
| 17-7-4. PROCEDURES .....                  | 17-7-1 |
| 17-7-5. ARTCC TO ARTCC COORDINATION ..... | 17-7-2 |
| 17-7-6. RESPONSIBILITIES .....            | 17-7-2 |
| 17-7-7. PROCEDURES .....                  | 17-7-2 |

**Section 8. Monitor Alert Parameter**

|   |        |
|---|--------|
| 17-8-1. PURPOSE .....                                   | 17-8-1 |
| 17-8-2. IMPLEMENTATION PROCEDURES .....                 | 17-8-1 |
| 17-8-3. RESPONSIBILITIES .....                          | 17-8-1 |
| 17-8-4. ANALYSIS REQUIREMENTS .....                     | 17-8-2 |
| 17-8-5. RESOLVING RECURRING SECTOR LOADING ISSUES ..... | 17-8-2 |

**Section 9. Ground Delay Programs**

|  |        |
|--|--------|
| 17-9-1. POLICY .....                   | 17-9-1 |
| 17-9-2. GENERAL .....                  | 17-9-1 |
| 17-9-3. BACKGROUND .....               | 17-9-1 |
| 17-9-4. DEFINITIONS .....              | 17-9-1 |
| 17-9-5. VARIABLES IN GDPs .....        | 17-9-1 |
| 17-9-6. ATCSCC PROCEDURES .....        | 17-9-1 |
| 17-9-7. ARTCC PROCEDURES .....         | 17-9-2 |
| 17-9-8. TERMINAL PROCEDURES .....      | 17-9-3 |
| 17-9-9. AMENDING EDCTs .....           | 17-9-3 |
| 17-9-10. CANCELLATION PROCEDURES ..... | 17-9-3 |
| 17-9-11. DOCUMENTATION .....           | 17-9-4 |



| <b>Paragraph</b>  | <b>Page</b> |
|---|-------------|
| 17-9-12. USER OPTIONS .....                             | 17-9-4      |
| 17-9-13. VFR FLIGHTS .....                              | 17-9-4      |
| <b>Section 10. Airspace Flow Programs (AFP)</b>         |             |
| 17-10-1. GENERAL .....                                  | 17-10-1     |
| 17-10-2. POLICY .....                                   | 17-10-1     |
| 17-10-3. RESPONSIBILITIES .....                         | 17-10-1     |
| 17-10-4. PROCEDURES .....                               | 17-10-1     |
| <b>Section 11. Ground Stop(s)</b>                       |             |
| 17-11-1. POLICY .....                                   | 17-11-1     |
| 17-11-2. GENERAL .....                                  | 17-11-1     |
| 17-11-3. LOCAL GROUND STOP(S) .....                     | 17-11-1     |
| 17-11-4. NATIONAL GROUND STOP(S) .....                  | 17-11-1     |
| 17-11-5. CANCELLATION PROCEDURES .....                  | 17-11-2     |
| 17-11-6. DOCUMENTATION .....                            | 17-11-2     |
| <b>Section 12. Special Traffic Management Programs</b>  |             |
| 17-12-1. SPECIAL EVENT PROGRAMS .....                   | 17-12-1     |
| 17-12-2. COORDINATION .....                             | 17-12-1     |
| 17-12-3. IMPLEMENTATION .....                           | 17-12-1     |
| 17-12-4. AIRPORT RESERVATION OFFICE .....               | 17-12-1     |
| <b>Section 13. Severe Weather Management</b>            |             |
| 17-13-1. GENERAL .....                                  | 17-13-1     |
| 17-13-2. DUTIES AND RESPONSIBILITIES .....              | 17-13-1     |
| <b>Section 14. Severe Weather Avoidance Plan (SWAP)</b> |             |
| 17-14-1. GENERAL .....                                  | 17-14-1     |
| 17-14-2. RESPONSIBILITIES .....                         | 17-14-1     |
| <b>Section 15. Preferred IFR Routes Program</b>         |             |
| 17-15-1. GENERAL .....                                  | 17-15-1     |
| 17-15-2. RESPONSIBILITIES .....                         | 17-15-1     |
| 17-15-3. DEVELOPMENT PROCEDURES .....                   | 17-15-1     |
| 17-15-4. COORDINATION PROCEDURES .....                  | 17-15-2     |
| 17-15-5. PROCESSING AND PUBLICATION .....               | 17-15-3     |
| <b>Section 16. North American Route Program</b>         |             |
| 17-16-1. PURPOSE .....                                  | 17-16-1     |
| 17-16-2. RESPONSIBILITIES .....                         | 17-16-1     |
| 17-16-3. PROCEDURES .....                               | 17-16-1     |
| 17-16-4. REPORTING REQUIREMENTS .....                   | 17-16-1     |
| 17-16-5. USER REQUIREMENTS .....                        | 17-16-1     |
| <b>Section 17. Coded Departure Routes</b>               |             |
| 17-17-1. PURPOSE .....                                  | 17-17-1     |
| 17-17-2. DEFINITION .....                               | 17-17-1     |

| <b>Paragraph</b>                | <b>Page</b> |
|---------------------------------|-------------|
| 17-17-3. POLICY .....           | 17-17-1     |
| 17-17-4. RESPONSIBILITIES ..... | 17-17-1     |
| 17-17-5. CDR DATA FORMAT .....  | 17-17-1     |
| 17-17-6. PROCEDURES .....       | 17-17-2     |

**Section 18. Route Advisories**

|  |         |
|--|---------|
| 17-18-1. PURPOSE .....                 | 17-18-1 |
| 17-18-2. POLICY .....                  | 17-18-1 |
| 17-18-3. EXPLANATION OF TERMS .....    | 17-18-1 |
| 17-18-4. ROUTE ADVISORY MESSAGES ..... | 17-18-1 |
| 17-18-5. RESPONSIBILITIES .....        | 17-18-2 |
| 17-18-6. PROCEDURES .....              | 17-18-2 |

**Section 19. Operations Plan**

|                                 |         |
|---------------------------------|---------|
| 17-19-1. PURPOSE .....          | 17-19-1 |
| 17-19-2. DEFINITION .....       | 17-19-1 |
| 17-19-3. RESPONSIBILITIES ..... | 17-19-1 |
| 17-19-4. PROCEDURES .....       | 17-19-2 |

**Section 20. National Playbook**

|  |         |
|--|---------|
| 17-20-1. PURPOSE .....                       | 17-20-1 |
| 17-20-2. POLICY .....                        | 17-20-1 |
| 17-20-3. DEFINITION .....                    | 17-20-1 |
| 17-20-4. RESPONSIBILITIES .....              | 17-20-1 |
| 17-20-5. NATIONAL PLAYBOOK DATA FORMAT ..... | 17-20-2 |
| 17-20-6. PROCEDURES .....                    | 17-20-2 |

**Section 21. Traffic Management (TM) Support of Non-Reduced Vertical Separation Minima (RVSM) Aircraft**

|  |         |
|--|---------|
| 17-21-1. PURPOSE .....                     | 17-21-1 |
| 17-21-2. POLICY .....                      | 17-21-1 |
| 17-21-3. DEFINITIONS .....                 | 17-21-1 |
| 17-21-4. EXCEPTED FLIGHTS .....            | 17-21-1 |
| 17-21-5. OPERATOR ACCESS OPTIONS .....     | 17-21-1 |
| 17-21-6. DUTIES AND RESPONSIBILITIES ..... | 17-21-1 |

**Section 22. Contingency Plan Support System (CPSS)**

|                                 |         |
|---------------------------------|---------|
| 17-22-1. PURPOSE .....          | 17-22-1 |
| 17-22-2. DEFINITION .....       | 17-22-1 |
| 17-22-3. RESPONSIBILITIES ..... | 17-22-1 |
| 17-22-4. PROCEDURES .....       | 17-22-1 |

**Part 6. REGULATORY INFORMATION**

**Chapter 18. Waivers, Authorizations, and Exemptions**

**Section 1. Waivers and Authorizations**

|                       |        |
|-----------------------|--------|
| 18-1-1. PURPOSE ..... | 18-1-1 |
|-----------------------|--------|

| <b>Paragraph</b>   | <b>Page</b> |
|--|-------------|
| 18-1-2. POLICY .....   | 18-1-1      |
| 18-1-3. RESPONSIBILITIES .....   | 18-1-1      |
| 18-1-4. PROCESSING CERTIFICATE OF WAIVER OR AUTHORIZATION<br>(FAA FORM 7711-2) REQUESTS .....    | 18-1-2      |
| 18-1-5. PROCESSING CERTIFICATE OF WAIVER OR AUTHORIZATION RENEWAL<br>OR AMENDMENT REQUESTS ..... | 18-1-2      |
| 18-1-6. ISSUANCE OF CERTIFICATE OF WAIVER OR AUTHORIZATION<br>(FAA FORM 7711-1) .....            | 18-1-2      |
| 18-1-7. RETENTION OF CERTIFICATES OF WAIVER OR AUTHORIZATION .....                               | 18-1-2      |
| 18-1-8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE .....  | 18-1-3      |
| 18-1-9. CANCELLATION OF WAIVERS AND AUTHORIZATIONS .....   | 18-1-3      |

**Section 2. Elimination of Fixed-Wing Special Visual Flight Rules Operations**

|                                |        |
|--------------------------------|--------|
| 18-2-1. PURPOSE .....          | 18-2-1 |
| 18-2-2. POLICY .....           | 18-2-1 |
| 18-2-3. RESPONSIBILITIES ..... | 18-2-1 |

**Section 3. Current Authorizations and Exemptions from Title 14, Code of Federal Regulations**

|  |        |
|--|--------|
| 18-3-1. AUTHORIZATIONS AND EXEMPTIONS FROM TITLE 14, CODE OF FEDERAL<br>REGULATIONS (14 CFR) ..... | 18-3-1 |
| 18-3-2. AUTHORIZATION AND EXEMPTION REQUESTS .....   | 18-3-1 |

**Section 4. Parachute Jump Operations**

|  |        |
|--|--------|
| 18-4-1. NONEMERGENCY PARACHUTE JUMP OPERATIONS ..... | 18-4-1 |
|--|--------|

**Section 5. Moored Balloons, Kites, Unmanned Rockets, and Unmanned Free Balloons/Objects**

|   |        |
|---|--------|
| 18-5-1. MOORED BALLOONS, KITES, UNMANNED ROCKETS, AND UNMANNED<br>FREE BALLOONS/OBJECTS ..... | 18-5-1 |
| 18-5-2. DERELICT BALLOONS/OBJECTS .....   | 18-5-1 |

**Chapter 19. Temporary Flight Restrictions**

**Section 1. General Information**

|   |        |
|---|--------|
| 19-1-1. PURPOSE .....   | 19-1-1 |
| 19-1-2. AUTHORITY .....   | 19-1-1 |
| 19-1-3. REASONS FOR ISSUING A TFR .....                             | 19-1-1 |
| 19-1-4. TYPES OF TFRs .....   | 19-1-1 |
| 19-1-5. TFR INFORMATION .....                                       | 19-1-1 |
| 19-1-6. ENTITIES REQUESTING TFRs .....                              | 19-1-1 |
| 19-1-7. ISSUING TFRs .....  | 19-1-1 |
| 19-1-8. TFRs OUTSIDE OF THE UNITED STATES AND ITS TERRITORIES ..... | 19-1-2 |
| 19-1-9. FACTORS FOR CONSIDERING TFR RESTRICTIONS .....              | 19-1-2 |
| 19-1-10. TFR QUESTIONS .....  | 19-1-2 |

**Section 2. Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas (14 CFR Section 91.137)**

|                       |        |
|-----------------------|--------|
| 19-2-1. PURPOSE ..... | 19-2-1 |
|-----------------------|--------|

| <b>Paragraph</b>                          | <b>Page</b> |
|---|-------------|
| 19-2-2. RATIONALE .....                   | 19-2-1      |
| 19-2-3. EXCEPTIONS .....                  | 19-2-1      |
| 19-2-4. REQUESTING AUTHORITIES .....      | 19-2-1      |
| 19-2-5. SITUATIONS FOR RESTRICTIONS ..... | 19-2-1      |
| 19-2-6. CAVEATS TO RESTRICTIONS .....     | 19-2-2      |
| 19-2-7. RESPONSIBILITIES .....            | 19-2-2      |
| 19-2-8. MESSAGE CONTENT .....             | 19-2-3      |
| 19-2-9. REVISIONS AND CANCELLATIONS ..... | 19-2-3      |

**Section 3. Temporary Flight Restrictions in National Disaster Areas  
in the State of Hawaii (Section 91.138)**

|  |        |
|--|--------|
| 19-3-1. PURPOSE .....                  | 19-3-1 |
| 19-3-2. REQUESTING AUTHORITIES .....   | 19-3-1 |
| 19-3-3. DEGREE OF RESTRICTIONS .....   | 19-3-1 |
| 19-3-4. DURATION OF RESTRICTIONS ..... | 19-3-1 |

**Section 4. Emergency Air Traffic Rules (14 CFR Section 91.139)**

|                                      |        |
|--------------------------------------|--------|
| 19-4-1. PURPOSE .....                | 19-4-1 |
| 19-4-2. REQUESTING AUTHORITIES ..... | 19-4-1 |
| 19-4-3. DEGREE OF RESTRICTIONS ..... | 19-4-1 |

**Section 5. Flight Restrictions in the Proximity of the Presidential  
and Other Parties (14 CFR Section 91.141)**

|                                      |        |
|--------------------------------------|--------|
| 19-5-1. PURPOSE .....                | 19-5-1 |
| 19-5-2. REQUESTING AUTHORITIES ..... | 19-5-1 |
| 19-5-3. DEGREE OF RESTRICTIONS ..... | 19-5-1 |

**Section 6. Flight Limitation in the Proximity of Space Flight  
Operations (14 CFR Section 91.143)**

|                                      |        |
|--------------------------------------|--------|
| 19-6-1. PURPOSE .....                | 19-6-1 |
| 19-6-2. REQUESTING AUTHORITIES ..... | 19-6-1 |
| 19-6-3. DEGREE OF RESTRICTIONS ..... | 19-6-1 |

**Section 7. Management of Aircraft Operations in the Vicinity of  
Aerial Demonstrations and Major Sporting Events (14 CFR Section  
91.145)**

|   |        |
|---|--------|
| 19-7-1. PURPOSE .....                                       | 19-7-1 |
| 19-7-2. POLICY .....  | 19-7-1 |
| 19-7-3. RESPONSIBILITIES .....                              | 19-7-1 |
| 19-7-4. RELATED DOCUMENTS .....                             | 19-7-2 |
| 19-7-5. COORDINATION .....                                  | 19-7-2 |
| 19-7-6. SPECIAL TRAFFIC MANAGEMENT PROGRAM GUIDELINES ..... | 19-7-3 |
| 19-7-7. PROCESS FOR TFRs .....                              | 19-7-3 |
| 19-7-8. REVISIONS AND CANCELLATIONS .....                   | 19-7-4 |

**Section 8. Special Security Instructions (14 CFR Section 99.7)**

|                                      |        |
|--------------------------------------|--------|
| 19-8-1. PURPOSE .....                | 19-8-1 |
| 19-8-2. REQUESTING AUTHORITIES ..... | 19-8-1 |
| 19-8-3. DEGREE OF RESTRICTIONS ..... | 19-8-1 |

| <b>Paragraph</b>          | <b>Page</b> |
|---------------------------|-------------|
| 19-8-4. DEFINITIONS ..... | 19-8-1      |

**Section 9. Security Notice (SECNOT)**

|                                |        |
|--------------------------------|--------|
| 19-9-1. POLICY .....           | 19-9-1 |
| 19-9-2. PURPOSE .....          | 19-9-1 |
| 19-9-3. RESPONSIBILITIES ..... | 19-9-1 |

**Part 7. SYSTEM OPERATIONS SECURITY**

**Chapter 20. Operations Security, Strategic and Tactical**

**Section 1. Organizational Missions**

|   |        |
|---|--------|
| 20-1-1. SYSTEM OPERATIONS SECURITY MISSION .....    | 20-1-1 |
| 20-1-2. STRATEGIC OPERATIONS SECURITY MISSION ..... | 20-1-1 |
| 20-1-3. TACTICAL OPERATIONS SECURITY MISSION .....  | 20-1-1 |

**Section 2. Organizational Responsibilities**

|   |        |
|---|--------|
| 20-2-1. STRATEGIC OPERATIONS SECURITY ..... | 20-2-1 |
| 20-2-2. TACTICAL OPERATIONS SECURITY .....  | 20-2-1 |
| 20-2-3. FIELD FACILITIES .....              | 20-2-1 |

**Section 3. Line of Authority**

|   |        |
|---|--------|
| 20-3-1. SYSTEM OPERATIONS SECURITY .....              | 20-3-1 |
| 20-3-2. AIR TRAFFIC SECURITY COORDINATOR (ATSC) ..... | 20-3-1 |

**Section 4. Supplemental Duties**

|  |        |
|--|--------|
| 20-4-1. DOMESTIC EVENTS NETWORK (DEN) .....  | 20-4-1 |
| 20-4-2. PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED VIP<br>MOVEMENT ..... | 20-4-1 |
| 20-4-3. SPECIAL INTEREST FLIGHTS (SIFs) .....  | 20-4-1 |
| 20-4-4. CONTINUITY OF OPERATIONS AND CONTINUATION OF GOVERNMENT<br>(COOP/COG) .....      | 20-4-2 |
| 20-4-5. CLASSIFIED OPERATIONS .....  | 20-4-2 |
| 20-4-6. INTELLIGENCE ANALYSIS AND COMMUNICATION .....                                    | 20-4-2 |

**Section 5. Coordination**

|   |        |
|---|--------|
| 20-5-1. COORDINATION .....                    | 20-5-1 |
| 20-5-2. COMMUNICATION AND DOCUMENTATION ..... | 20-5-1 |
| 20-5-3. RESPONSIBILITIES .....                | 20-5-1 |

**Appendices**

|  |              |
|--|--------------|
| Appendix 1. Air Carrier Contact for the Distribution of Incident Reports .....       | Appendix 1-1 |
| Appendix 2. Air Carrier Points of Contact for Aircraft Identification Problems ..... | Appendix 2-1 |
| Appendix 3. Air Carrier Aircraft for Air Traffic Activity Operations Count .....     | Appendix 3-1 |
| Index .....  | I-1          |



**d. Alert Phases:** Operations personnel may categorize local alerts if the category or phase designations have been coordinated locally and agreed to. It may be desirable for emergency equipment to be alerted on a standby or ready basis by use of a two-phase or three-phase alert system, but keep these actions as inconspicuous as possible without impairing efficiency. A three-phase alert may be set up as follows:

**1. Alert I:** Indicating an aircraft approaching the airport is in minor difficulty; e.g., feathered propeller, oil leak, etc. The emergency equipment and crews would standby at the equipment house for further instructions.

**2. Alert II:** Indicating an aircraft approaching the airport is in major difficulty; e.g., engine on fire, faulty landing gear, no hydraulic pressure, etc. This could mean emergency equipment would proceed to a predetermined location (end of runway, etc.) to await development of the potential emergency.

**3. Alert III:** Indicating an aircraft involved in an accident on or near the airport and emergency equipment should proceed immediately to the scene.

**e.** After alerting the emergency equipment, notify only the local aircraft operator or his/her representative and the airport management.

**NOTE-**

*Airport management is responsible for notifying other agencies or personnel.*

**REFERENCE-**

*Advisory Circular AC 150/5210-7C, Airport Rescue and Fire Fighting Communications.*

## **2-1-11. EXPLOSIVES DETECTION K-9 TEAMS**

At many of our major airports a program has been established by the FAA and the Law Enforcement Assistance Administration to make available an explosives detection K-9 team. ATC facilities shall take the following actions should they receive an aircraft request for the location of the nearest explosives detection K-9 team:

**a.** The facility will relay the pilot's request to the FAA Washington Operations Center, AEO-100, telephone: commercial (202) 267-3333; ETN

521-0111; or DSN 851-3750 providing the aircraft's identification and position.

**b.** AEO-100 will provide the facility with the nearest location. The facility will have AEO-100 standby while the information is relayed to the pilot.

**c.** After it has been determined that the aircraft wishes to divert to the airport location provided, the air traffic facility will ascertain estimated arrival time and advise AEO-100. AEO-100 will then notify the appropriate airport authority at the diversion airport. In the event the K-9 team is not available at this airport, AEO-100 will relay this information to the air traffic facility providing them with the secondary location. ATC will then relay this to the pilot concerned for appropriate action.

## **2-1-12. INTERSECTION TAKEOFFS**

Air traffic managers at ATCTs and at AFSS/FSS facilities that provide LAA will prepare an airport diagram showing intersection takeoff information as follows:

**a.** Indicate the actual remaining runway length from each intersection; round all actual measurements "down" to the nearest 50-feet. Obtain measurements from an authentic source and record them on the diagram.

**NOTE-**

*Some airports publish "declared distances" for a particular runway. These are published in the Airport Facility Directory (A/FD) or the Aeronautical Information Publication (AIP), and there is no requirement that facility personnel be made aware of them. These distances are a means of satisfying airport design criteria and are intended to be used by pilots and/or operators for preflight performance planning only. There are no special markings, signage, or lighting associated with declared distances, and they do not limit the actual runway available for use by an aircraft. Therefore, they cannot be used for any air traffic control purpose. If pilots inquire about the existence of declared distances, refer them to the A/FD or the AIP.*

**b.** If the airport authority requests that certain intersection takeoffs be denied, so indicate on the diagram.

**EXAMPLE-**  
*/NO TKOFF/*

**c.** Indicate any access points to a runway from which an intersection takeoff may be made.

## 2-1-13. AIRCRAFT IDENTIFICATION PROBLEMS

To alleviate any potential misunderstandings of aircraft identifications caused by duplicate, phonetically similar-sounding, or hard to distinguish registration numbers or call signs operating in the same area, facility managers shall ensure that operations supervisors report those occurrences to a facility officer and that the following actions be taken.

**a. Scheduled air carrier aircraft:** When two or more air carriers with duplicate flight numbers or phonetically similar-sounding call signs operate within 30 minutes of each other at the same airport or within the same sector and cause an identification problem on a recurring basis, request that the flight identification numbers be changed by:

### **NOTE-**

*Recurrent situations would be aircraft proceeding primarily the same direction through the same sectors three or more times a week, at least two weeks out of four consecutive weeks.*

**1.** In the case of carriers listed in Appendix 2, Air Carrier Points of Contact for Aircraft Identification Problems, contact the appropriate airline office or officer.

**2.** If other than one of the carriers listed in Appendix 2, contact the operator or the chief pilot of the carrier concerned.

**b. Military aircraft:** Contact base operations of the departure airport and request that action be taken to have the flight identifications changed when duplicate, phonetically similar, or hard to distinguish call signs are causing a flight identification problem. If additional assistance is required, immediately advise the appropriate FAA liaison officer (HQ ACC/DOF, HQ AMC/DOF, NORAD/ADC, HQ AETC/XOS, HQ AFMC/DOF, HQ AFSPC/DOGH) or the military representative assigned to the Service Area office.

**c. Civil aircraft other than air carrier:** Advise System Operations Airspace and Aeronautical Information Management, when two or more designated call signs are found to be phonetically similar or difficult to pronounce and are causing a flight identification problem.

**d.** The designated facility officer shall maintain a record of actions taken and provide feedback to operations supervisors. That record should include:

1. Date/time of occurrence.
2. Location (e.g., RUS VORTAC, sector 90, Shannon Airport).
3. Call signs involved in the occurrence.
4. Date occurrence is reported by facility.
5. Office/person that facility contacted.

## 2-1-14. APPROACH CONTROL CEILING

The airspace ceiling of areas within which approach control service is provided should not exceed 10,000 feet AGL. Exceptions require a staff study and specific approval of the Vice President of System Operations Services.

### **NOTE-**

*Although en route ATS is a center function, terminal facilities may be expected to provide some en route service. There are some areas in which a center may not have adequate radar coverage or resources, and in these areas it may be necessary to expand the terminal airspace to provide service. Conversely, at locations with nonradar approach control facilities, centers may have radar coverage, and better service would be provided if some approach control airspace is recalled to the center. At certain locations, the center may be able to absorb all the airspace of a nonradar approach control. The Area Directors of En Route and Oceanic Operations and Terminal Operations shall weigh all factors and provide optimum resolutions.*

## 2-1-15. AUTHORIZATION FOR SEPARATION SERVICES BY TOWERS

**a.** Nonapproach control towers, not equipped with a tower radar display, may be authorized to provide appropriate separation between consecutive departures based upon time or diverging courses, and between arrivals and departures, provided:

1. A LOA exists with the IFR facility having control jurisdiction which authorizes the separation responsibilities and prescribes the procedures to be used;
2. The agreement has been approved by the Area Director of Terminal Operations; and
3. There is no delegation of airspace to the tower.



**b.** Towers equipped with certified tower radar displays (CTRD) may be authorized to provide separation services in accordance with para 10-5-3, Functional Use of Certified Tower Radar Displays.

**c.** An authorization for towers to provide separation services other than those prescribed in subparas a and b shall be supported by a staff study prepared by the authorizing facility or the Terminal Operations Service Area office which addresses at least:

1. The proposed procedures.
2. Operational benefits.
3. Operational impact.
4. Why the IFR facility is unable to provide an equal or superior level of service without the delegation.
5. Improved services to users.
6. Additional radar training.
7. The measures taken to ensure that the local controller's ability to satisfy the FAA's air traffic responsibilities regarding aircraft operating on the runways or within the surface area is not impaired.
8. On-site spares, maintenance support/restoration requirements.
9. Savings and/or additional costs.
10. The number of additional people required.

**d.** The staff study shall, following the Terminal Operations Service Area review and concurrence, be forwarded to Terminal Services through System Operations Planning, and System Safety and Procedures for approval. System Operations Planning will coordinate with all affected Technical Operations Services Area Service Directors prior to finalizing their comments and recommendations.

## **2-1-16. BIRD HAZARDS**

The air traffic manager of the ATCT shall establish procedures to:

**a.** Ensure that any reported bird strikes or trend toward an increase in bird activity on or around the airport served by the ATCT are reported to airport management.

**b.** Ensure that coordination will be accomplished with airport management for the possible issuance of NOTAMs when flocks of birds roost on the runways.

### **NOTE-**

*It is the responsibility of airport management to issue any such NOTAMs.*

**c.** Participate in local bird hazard programs when established by airport management.

## **2-1-17. PROHIBITED/RESTRICTED AREAS**

FAAO JO 7110.65, Air Traffic Control, prescribes separation requirements from special use and ATC assigned airspace. In recognition of the fact that several prohibited/restricted areas are established for security reasons or to contain hazardous activities not directly involving aircraft operations, provision is made for exempting these areas from vertical and radar separation minima if the areas have been identified by facility management. The intent in prescribing separation requirements from special use and ATC assigned airspace is to establish a buffer between nonparticipating aircraft and aircraft operations inside special use or ATC assigned airspace. As such, the buffer serves as an extra safety margin in consideration of possible operational, procedural, or equipment variances. Application of the separation prescribed in FAAO JO 7110.65 is not considered necessary whenever the prohibited/restricted airspace does not contain aircraft operations because these areas typically provide an internal buffer based upon the exact type of activity taking place. In making a determination to exempt specific areas, air traffic facility managers shall be guided by the following:

**a.** Determine the exact nature of prohibited/restricted area utilization through direct liaison with the using agency.

**b.** Coordinate with the Service Area office during the analysis of area utilization.

**c.** The following types of activity are examples of restricted area utilization which often will not require application of separation minima:

1. Explosives detonation.
2. Ground firing of various types.
3. Drone and other unmanned aircraft flight operations.

4. Aircraft operations associated with the above in a safety, observer, or command and control capacity only; i.e., the aircraft is not directly engaging in activity for which the airspace was designated and is operating visual flight rules (VFR).

d. If area utilization varies between aircraft operations and other types of activity as described above, do not exempt the area from separation requirements unless a significant operational advantage can be obtained.

e. Restricted airspace with the same number but different letter suffixes are considered to be separate restricted areas. However, treat these types as one restricted area for the purpose of identifying areas for exemption from separation requirements in order to simplify application of separation minima unless a significant operational advantage can be obtained.

## 2-1-18. WASHINGTON, DC, SPECIAL FLIGHT RULES AREA (DC SFRA)/ATC SECURITY SERVICES

ATC security services are designed to support the national security mission of the FAA and other agencies. A designated security services position has area responsibility for the purpose of security service. Such positions do not have airspace jurisdiction and are not ATC operational positions for purposes beyond the scope of this section, for example, transfer of control, communications, point-out, etc.

a. The FLM/CIC shall report all instances of loss of radio communication, intermittent transponder or transponder/Mode C failure, the inability to security track aircraft, and other unusual IFR/VFR flight information to the Domestic Events Network (DEN) through the appropriate lines of communication. Some examples are, but are not limited to; suspicious activities, deviation from assigned course/altitude, or other equipment malfunction that may cause an aircraft to operate in an unexpected manner. Relay all known information regarding the aircraft.

b. ATC Security Services Position: ATC Security Services Position is responsible for providing ATC security services as defined. This position does not provide air traffic control IFR separation or VFR flight following services, but is responsible for providing security services in an area comprising airspace assigned to one or more ATC operating

sectors and as such, normal airspace jurisdictional constraints do not apply.

c. Facility manager shall:

1. Designate in a facility directive which existing position(s) and frequencies will be utilized to provide Security Services when required and the transition procedures from the ATC operational status to the Security Services Position.

2. Ensure that contingency plan parent and support procedures are updated regarding operational capability level (OCL) changes that affect Special Security Areas.

### NOTE-

*The requirement to establish an ATC Security Services Position in addition to ATC operating position does not by itself constitute a need for additional staffing nor is its purposes intended to justify or deny facility staffing needs.*

d. When the Security Services position and the ATC Operating position are both staffed, detailed position responsibilities shall be defined in the facility directive.

### NOTE-

*Airspace sectorization and the workload associated with the normal use of that airspace may degrade the ability of an ATC operation position to provide security services. When this occurs, pilots shall be held outside of the security services area in accordance with FAAO JO 7110.65 para 9-2-1, Aircraft Carrying Dangerous Materials, subpara b2.*

1. When an ATC Security Services Position is not separately staffed, the appropriate ATC operating position responsible for that airspace will assume the security service responsibilities.

2. Requests for ATC services to VFR aircraft operating within the designated area to enter positive controlled airspace shall be issued by the appropriate radar position in accordance with FAAO JO 7110.65, Air Traffic Control, and other applicable directives.

e. Adjacent Airport Operations

1. Aircraft that will enter the designated airspace after departing controlled airports within or adjacent to security areas shall be provided security services by the appropriate ATC facility having jurisdiction over the affected airspace. Procedures for handling this situation must be covered in a Letter of Agreement (LOA) or facility directive as appropriate.

2. Aircraft departing uncontrolled airports within security areas must be handled using

procedures contained in a NOTAM or rule designating the area where ATC security services are required.

## **2-1-19. AIRPORT TRAFFIC PATTERNS**

**a.** The Area Directors of Terminal Operations are the focal point to review traffic patterns. Traffic patterns at airports without an operating control tower should be established in accordance with Advisory Circular, AC 90-66, Recommended Standard Traffic Patterns and Practices for Aeronautical Operations at Airports without Operating Control Towers.

**b.** FAAO JO 7400.2, Procedures for Handling Airspace Matters, will be the source for handling technical matters pertaining to the establishment or the revision of traffic patterns.

## **2-1-20. OBSTACLE IDENTIFICATION SURFACES, OBSTACLE FREE ZONES, RUNWAY SAFETY AREAS, AND CLEARWAYS**

**a.** Facility air traffic managers shall monitor planned airport construction projects, work with the regional airports office and the airport manager in determining the need to modify any taxi routes normally used, and request notification from the airport manager when adequate signage and marking are completed on the new/different taxi routes, while ensuring that local procedures provide protected airspace from adjacent, nonintersecting runways and taxiways where simultaneous use could create hazards for arriving and departing aircraft. These procedures shall be reviewed whenever new runways or taxiways are programmed or whenever new/different aircraft are scheduled to provide service to the airport.

**b.** Ensure that aircraft on the ground do not penetrate marked Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas, or Clearways, or other airspace designed to provide protection for departures and arrivals.

**c.** At locations where potential for conflict exists, take action to rectify the situation by developing guidelines to ensure that this airspace is not penetrated by aircraft utilizing other runways or

taxiways. Proposed solutions should be developed in conjunction with local airport authorities and coordinated with appropriate FAA offices to confirm their validity; e.g., Flight Standards and Airports.

## **2-1-21. FACILITY IDENTIFICATION**

**a.** Service Area Directors are the focal point to review/approve requests for waivers for facility identification changes in FAAO JO 7110.65, Air Traffic Control, para 2-4-19, Facility Identification, subparas a, b, and c, and FAAO JO 7110.10, Flight Services, para 14-1-14, Facility Identification, subparas a, b, and c. If the waiver request is approved, the Service Area Director shall ensure that all aeronautical publications are changed to reflect the new identification, and that a Letter to Airmen is published notifying the users of the change.

**b.** Service Area Directors shall forward a copy of the approval to System Operations Services.

## **2-1-22. DISPOSITION OF OBSOLETE CHARTS**

**a.** Obsolete charts may only be disposed of by destroying, including recycling, or by giving to flight schools and other training institutions where the charts are to be used only for training in the classroom. Under no circumstances should obsolete charts be given to pilots or the general public, regardless if they are marked obsolete or not.

**b.** There are hundreds of changes that appear on each new edition of a chart. When pilots are given obsolete charts they are not aware of critical changes that have occurred. Further, the use of such a chart could result in a Code of Federal Regulations (CFR) violation or an accident which would have serious legal implications for the agency.

## **2-1-23. OUTDOOR LASER DEMONSTRATIONS**

**a.** The Area Directors of Terminal Operations Services are the focal point for reviewing/approving requests for outdoor laser demonstrations.

**b.** FAAO JO 7400.2, Procedures for Handling Airspace Matters, is the source for processing outdoor laser demonstration requests.

### **2-1-24. COMBINE/RECOMBINE AN ATCT/TRACON**

Prior to consideration for any ATCT/TRACON to combine or recombine, a detailed staff study will be required from the facility explaining the benefit to the agency and the customer. After the Terminal Operations Service Area office review, the staff study shall be forwarded to the Director of Terminal Planning. A decision to combine or recombine an ATCT/TRACON will require coordination with the ATO Chief Operating Officer.

### **2-1-25. SUBMISSION OF AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA) DATA**

Submit data on all ATCAAs used on a continuing/constant basis, and any subsequent changes to the ATCAA database to System Operations Security; and System Operations Airspace and Aeronautical Information Management for the purpose of updating the Special Use Airspace Management System (SAMS) and Aeronautical Information System. Include the following as applicable:

**a.** An En Route and Oceanic Operations Area Office transmittal memorandum containing a brief overview of the ATCAA, and/or changes to, FAA headquarters, System Operations Security; and System Operations Airspace and Aeronautical Information Management. Summarize the ATCAAs or any amendments made to ATCAAs including additional changes, etc.

**b.** A separate attachment that contains a description of the area to include latitude/longitude points, boundaries, altitudes, times, controlling agency, using agency, and any other relative information.

**NOTE-**

*If only part of the description of an existing area is being amended, the attachment should show just the changed information rather than the full legal description.*

**c.** A sectional aeronautical chart depicting the final boundaries of the proposed area, including any subdivisions.

**d.** Any other information that should be considered by FAA headquarters.

**NOTE-**

*ATCAA descriptive data will normally be submitted*

*9 weeks prior to the requested/required airspace effective date.*

### **2-1-26. SUBMISSION OF SUA AND PAJA FREQUENCY INFORMATION**

The Aeronautical Information Services maintain a national database of Special Use Airspace (SUA) and Parachute Jump Area (PAJA) controlling sector contact information. The database is used to publish frequencies for pilots to obtain status information for SUAs and PAJAs. Facility managers should ensure that the following information is forwarded to Aeronautical Information Services:

**a.** Contact frequencies for existing SUAs and PAJAs within your area of jurisdiction.

**b.** Any changes to contact frequencies for existing SUAs and PAJAs within your area of jurisdiction.

**c.** Contact frequencies for any new SUAs or PAJAs within your area of jurisdiction.

### **2-1-27. REPORTING UNAUTHORIZED LASER ILLUMINATION OF AIRCRAFT**

All FAA Air Traffic Control facilities, Federal Contract Towers and Flight Service Stations shall report unauthorized laser illumination incidents through the Domestic Events Network (DEN), providing the following information:

**a.** UTC date and time of event.

**b.** Call Sign, or aircraft registration number.

**c.** Type of aircraft.

**d.** Nearest major city.

**e.** Altitude.

**f.** Location of event (e.g., latitude/longitude and/or Fixed Radial Distance (FRD)).

**g.** Brief description of the event.

**h.** Any other pertinent information.

**NOTE-**

*Facilities without direct access to the DEN shall forward the information through the overlying TRACON or ARTCC facility.*

**REFERENCE-**

*FAAO JO 7110.65, Para 2-9-3, Content*

*FAAO JO 7110.65, Para 10-2-14, Unauthorized Laser Illumination of Aircraft.*

**2-1-28. SUSPICIOUS AIRCRAFT/PILOT  
ACTIVITIES**

Facility air traffic managers must ensure that processes are in place to direct prompt notification to the DEN of any suspicious aircraft/pilot activities as prescribed in FAA Order JO 7610.4, paragraph 7-3-1.



## Section 2. Responsibilities

### 2-2-1. LEGAL LIABILITIES OF PERSONNEL

a. Guidelines for representing Federal employees named in tort claims are promulgated by the Department of Justice (28 CFR Part 50).

b. When warranted, disciplinary action shall be taken without regard to possible adverse effects on the FAA position in subsequent lawsuits, enforcement proceedings, or similar actions.

c. In the case of an accident or incident resulting in a National Transportation Safety Board (NTSB) or a military investigation or hearing, it may be necessary to delay disciplinary action until the determination of the investigation or hearing. This is done only to ensure that all facts are known before final action is taken. The determination in such investigations shall not be used as a basis for initiating disciplinary action.

### 2-2-2. JOB REQUIREMENTS

Each person shall be familiar with the duties and responsibilities of his/her own position, those of his/her subordinates, if applicable, and to a limited extent, with those of his/her immediate supervisor. Each specialist, when designated, shall supervise and assist in training other specialists as appropriate.

### 2-2-3. POSITION RESPONSIBILITY

Air traffic managers must ensure that only one certified air traffic controller is signed on and responsible for each open position, to include consolidated positions, at any given time. At the ATCSCC, the national traffic management officer (NTMO), national traffic management specialist-in-charge (NTMSIC), and national traffic management specialist (NTMS) work as a team in order to accomplish the traffic management goals of an entire operational area. Due to the management functionality involved in overseeing the NAS, more than one NTMO, NTMSIC, and/or NTMS can be signed on and responsible for an open and/or consolidated control position.

#### **NOTE-**

*When a developmental and an instructor are both signed*

*on at a position, the instructor is responsible for all activity at that position.*

### 2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY

a. Air traffic managers shall determine which sectors or positions require "duty familiarization" for each shift and shall provide a facility directive which specifies all sources of operational information which must be read and/or discussed as a part of the familiarization. Familiarizations should be scheduled within an 8-hour shift to the extent possible.

b. Air traffic managers shall determine which sectors or positions must maintain operational continuity through a transfer of position responsibility and shall:

1. Review each sector or position and provide a tailored checklist which lists the equipment and the operational conditions which are likely to be a factor at that position.

(a) Items which should be included on the checklist, if relevant, are:

- (1) STATUS INFORMATION AREA/S.
- (2) EQUIPMENT: NAVAIDS, Radar(s), Radios, Automated Weather Observing Systems, etc.
- (3) AIRPORT CONDITIONS/STATUS.
- (4) AIRPORT ACTIVITIES; e.g., snow removal, vehicles on runway, etc.
- (5) ALTIMETER/TRENDS.
- (6) WEATHER/TRENDS.
- (7) FLOW CONTROL.
- (8) SPECIAL ACTIVITIES; e.g., restricted/warning areas in use, airshows, flight checks, new procedures, etc.
- (9) SPECIAL INSTRUCTIONS/RESTRICTIONS; e.g., due to adjacent position training, nonstandard staffing/configuration, etc.
- (10) STAFFING.
- (11) TRAINING IN PROGRESS.
- (12) VERBALLY STATE RUNWAY STATUS; unavailable, closed, occupied.

**(13) PERTINENT OPERATIONAL NOTAMS, UNLESS PREVIOUSLY COVERED.**

**NOTE-**

*Air traffic managers at facilities equipped with automated NOTAM systems shall designate those systems as the primary source of NOTAM information. (This does not include AFSS legacy systems.)*

**(14) Non-RVSM aircraft operations.**

**(15) COMMUNICATION STATUS and TRAFFIC.**

**(b)** The checklist for a specific position need not include those items which are incorporated into the Status Information Area/s used by that position.

**(c)** Status Information Area/s (SIA), when available, shall be the first item listed on the position checklist.

**(d)** When traffic is included on the position checklist, it shall be the last item listed. When relevant to the position, include the following sub-items under the traffic heading so that they will not be inadvertently overlooked:

**(1)** Special Activity Aircraft; e.g., aircraft operating in a special use area/airspace, helicopters on prescribed routes, etc.

**(2)** Point out aircraft.

**(3)** Holding aircraft.

**(4)** Primary targets with no associated alphanumerics.

**(5)** Aircraft handed off but still in the airspace.

**(6)** Aircraft released but not yet airborne.

**(7)** Nonradar operations.

**(8)** VFR advisory aircraft.

**(9)** Aircraft standing by for service.

**(10)** Coordination agreements with other positions.

**(11)** Special problems, requests, or instructions.

**(e)** Air traffic managers may *increase* the number of items and/or the level of detail of the position relief checklists as they deem necessary.

**2.** To the extent possible, provide a SIA/s from which specialists may obtain the operational

information relevant to the position being worked. The SIA/s may consist of a single or any combination of informational sources where status information can be recorded and displayed. These areas may include, but not be limited to, facility/area/position status boards, weather status boards, "hot item" binders, clip board information sheets, and designated areas for written notes.

**3.** Designate, through a facility directive, the position/s having responsibility for the accuracy of the various items contained on the SIA/s. The designated position/s should be the focal point for the type of status information for which they are responsible and, except for the accuracy of written notes located at the position, should not be a specialist having primary and direct responsibility for the provision of service or separation to aircraft.

**c.** To the maximum extent practicable the position relief briefing shall be recorded.

**d.** Specialists manning the positions identified under subpara 2-2-4b, requiring the maintenance of operational continuity, shall conduct a position relief briefing in accordance with FAAO JO 7110.65, Air Traffic Control, Appendix D, Standard Operating Practice (SOP) for the Transfer of Position Responsibility, or FAAO JO 7110.10, Flight Services, para 1-3-3, Duty Familiarization and Transfer of Position Responsibility.

**e. Responsibilities:**

**1.** The specialist being relieved shall be responsible for ensuring that any pertinent status information of which he/she is aware is relayed to the relieving specialist and is either:

**(a)** Accurately displayed on the SIA/s for which he/she has responsibility, or

**(b)** Relayed to the position having the responsibility for accurately displaying that status information.

**2.** The relieving specialist shall be responsible for ensuring that any unresolved questions pertaining to the operation of the position are resolved prior to accepting responsibility for the position.

**3.** The relieving specialist and the specialist being relieved shall share equal responsibility for the completeness and the accuracy of the position relief briefing.

**NOTE-**

*The sharing of this responsibility means that the specialist*



*being relieved is obligated to provide a complete, accurate briefing, and the relieving specialist is obligated to ensure that a briefing takes place and is to his/her total satisfaction.*

4. The specialists engaged in a position relief shall conduct the relief process at the position being relieved unless other procedures have been established and authorized by the facility air traffic manager.

#### **2-2-5. OPERATING INITIALS**

a. Specialists shall be assigned two-letter operating initials to identify the employee for record purposes. When all combinations of letters are depleted, duplicate initials may be assigned to personnel working in different areas of specialization.

b. Unless signatures are specifically requested, use assigned operating initials for all operating forms, interphone contacts, marking of recorder tapes, and other records.

c. A current file of assigned initials shall be maintained.

#### **2-2-6. SIGN IN/OUT AND ON/OFF PROCEDURES**

The following is applicable to all FAA air traffic facilities, but does not apply to FAA contract facilities.

Cru-X/ART is the official time and attendance system for both signing in/out for a shift and on and off positions, not paper logs nor Common ARTS/HOST/NTML/FSS operational system or other Agency or local programs. Facilities may use Common ARTS/HOST/NTML/FSS operational system to sign on positions for position preference settings; however, these systems/programs must not be used for official time and attendance nor position times. Duplicate paper logs for sign in/out of the shift and on and off positions must not be utilized during normal daily operations.

a. FAA operations managers-in-charge (OMIC)/front-line managers (FLM)/supervisory traffic management coordinators (STMC)/national operations managers (NOM)/national traffic management officers (NTMO)/controllers-in-charge (CIC) of the watch are responsible for ensuring the accuracy of the

personnel log for time and attendance (T&A) recording. T&A information must be entered into and maintained within the ATO Resource Tool (ART) system approved.

1. The facility air traffic manager shall ensure that procedures are in place so that operational schedules are entered correctly into ART.

2. Employees shall use ART to sign in and out of their shifts.

(a) Sign in for a shift shall be accomplished no later than the shift assigned time unless the OS/STMC/NTMO/CIC and/or OMIC has approved leave at the start of the assigned shift. Sign in, using the assigned shift start time, may occur up to 15 minutes before an employee's assigned shift. Earning of, and signing in for, Time Outside Shift time at the beginning of an assigned shift must receive approval by the OS/STMC/NTMO/CIC or OMIC prior to earning or recording it into Cru-X/ART.

**NOTE-**

*Shift/Core hour changes must be in accordance with local and national policy. Earning Time Outside Shift (overtime, credit hours, etc.) must be approved by the OS/STMC/NTMO/CIC or OMIC prior to entering it into Cru-X/ART or working it.*

(b) In situations where it is known in advance that employees will not report to the facility, such as when attending an all day meeting outside the facility, facilities should enter the employee's shift in the schedule as an Other Duty Code.

(c) Sign out shall be accomplished at the end of an employee's assigned shift. Sign out using the assigned shift end time may be accomplished no earlier than 15 minutes prior to the end of the shift, or no later than 15 minutes after the end of the assigned shift. Any Time Outside Shift at the end of an assigned shift, or leave, must first receive OS/STMC/NTMO/CIC or OMIC approval prior to earning/using and recording such time in Cru X/ART.

3. The supervisor/CIC position relief briefing check list shall include:

(a) T&A status,

(b) Other Duties,

(c) Time Outside Shift (TOS) requests/approvals, and

(d) Leave requests/approvals.

**NOTE-**

*Upon signing on position the OMIC/FLM/STMC/NOM/*

*NTMO/CIC assumes full responsibility of all check list items including those identified above.*

4. It is the employee's responsibility to notify the OMIC/FLM/STMC/NOM/NTMO/CIC of the watch of any changes to "Other Duty" shifts. For example, an employee is outside of the facility on another duty and requests a day of sick leave.

5. In the event of electronic system failure, scheduled system outage, or facility evacuation, the paper FAA Form 7230-10, "Position Log," shall be used to indicate position responsibility. When the ART system has been restored or the facility reoccupied, the facility shall ensure that all data collected with the paper FAA Form 7230-10's is entered into ART. In instances where the data cannot be entered into ART, the paper FAA Form 7230-10's shall be retained in accordance with document retention guidance.

b. The Cru-X/ART electronic logs shall be used to indicate responsibility at all operational positions and for supervisory traffic management coordinator-in-charge (STMCIC), operations supervisor-in-charge (OSIC), traffic management coordinator-in-charge (TMCIC), and CIC functions. It is the responsibility of the relieved controller to enter the correct change of position responsibility time in Cru-X/ART. In situations where there is no relieved controller, such as when opening a position, the person opening the position is responsible for entering the correct position time or notifying the supervisor/STMC/CIC of the position opening time. The supervisor/STMC/NTMO/CIC shall then enter that time into Cru-X/ART.

## 2-2-7. CIRNOT HANDLING

A CIRNOT initiated by WMSCR/NNCC shall be transmitted to all circuit users.

a. WMSCR/NNCC shall maintain a record of all CIRNOTs and forward a hard copy to FAA Headquarters, Terminal Safety and Operations Support by the most expeditious means available.

b. AFSS/FSS air traffic managers shall provide CIRNOTs to the Terminal Operations Service Area office and/or other field facilities upon request.

c. CIRNOTs should be retained at the receiving facility for 120 days.

### **NOTE-**

*The most expeditious means is transmitting the CIRNOT via facsimile, telephone, mail, electronic mail, etc.*

## 2-2-8. GENOT HANDLING

A GENOT initiated by headquarters ATO organizations, requiring distribution to air traffic facilities, shall be transmitted to all Service Area offices, Flight Service Stations (FSS), Automated Flight Service Stations (AFSS), and ARTCC.

a. Terminal Operations Service Area office shall distribute GENOTs to the following using the most expeditious means available:

1. FAA contract and non-Federal towers.

2. FAA military ATREPS assigned to the service area.

### **NOTE-**

*The most expeditious means is transmitting the GENOT via facsimile, telephone, mail, electronic mail, etc.*

b. The AFSS/FSS shall distribute the GENOT to all FAA field facilities addressed, except ARTCCs, within their designated areas as determined by the respective Service Area office using the most expeditious means available.

### **REFERENCE-**

*FAAO JO 7210.3, Para 2-2-8a2 Note.*

c. Terminal Hub facilities distribute all GENOTs in plain language format to all non-Federal and contract ATCTs which are located within their Hub Area. The GENOT shall be distributed in the most expeditious means available.

### **REFERENCE-**

*FAAO JO 7210.3, Para 2-2-8a2 Note.*

d. Air traffic managers at all facilities shall:

1. Disseminate GENOT information to concerned facility personnel. The content of the message will dictate the priority of the distribution.

2. Ensure that all employees with a need to know are thoroughly briefed on the change prior to performing their duties.

3. Ensure that the appropriate entry is made in the employee's Training and Proficiency Record, Form 3120-1.

## **2-2-9. PERSONNEL BRIEFINGS REGARDING AIR TRAFFIC BULLETIN ITEMS**

The Air Traffic Bulletin is a means of communication between headquarters and field facilities. It is routinely published and distributed quarterly. In addition, special issues are published and distributed as necessary. It is not a directive, nor is it to implement new procedures. Its intent is to transmit “reminders” concerning proper application of procedures and other instructions. To provide continuity of communication, facility air traffic managers shall:

**a.** Ensure that the facility is on the distribution list for the Air Traffic Bulletin. Any corrections/additions/deletions should be directed thru the regional distribution officer.

**b.** Ensure that Air Traffic Bulletin items with operational/procedural impacts are verbally discussed/briefed with facility personnel. These briefings shall take place within 30 days after receipt of the bulletin. Once the briefings are given, a notation shall be inserted in each individual’s FAA Form 3120-1, including the certification signature provided by the staff specialist/supervisor and the employee’s initials.

**1.** The option/s for which a briefing is required will be indicated by an asterisk followed by one or more letter designators; i.e.:

**(a)** \*T – Tower, combined tower/approach control;

**(b)** \*R – TRACON;

**(c)** \*F – AFSS/FSS;

**(d)** \*E – ARTCC (En Route);

**(e)** \*EF – ARTCC and FSS; etc.

**2.** The option/s for which briefings are recommended but not required will follow the option/s for which briefings are required, separated by a slash; i.e., /\*T/E, indicates that for the en route option the briefing is recommended.

**c.** Solicit suggested Air Traffic Bulletin items, having operational/procedural impact from facility personnel at regular personnel or crew briefings; evaluate and forward those considered appropriate for Service Area office review. Service area offices shall evaluate and forward to System Safety

Procedures those proposals considered significant and national in scope.

## **2-2-10. LAW ENFORCEMENT INFORMATION**

Law enforcement information; e.g., aircraft identification, flight schedules, flight operations, procedures, aircraft lookouts, etc., is of great value to drug traffickers and others attempting to circumvent the law. Although law enforcement information is normally unclassified, it is considered to be inherently sensitive, of a confidential nature, and is to be handled on a “For Official Use Only” (FOUO) basis. Facility air traffic managers shall ensure that such information is safeguarded from disclosure in accordance with FAAO 1600.2, Safeguarding Controls and Procedures for Classified National Security Information and Sensitive Information, whether the information is physically marked with the FOUO term or not. “Safeguarded from disclosure” includes precaution against oral disclosure, prevention of visual access, and precaution against unauthorized release, gratuitously or in response to a specific request.

## **2-2-11. PERSONNEL BRIEFINGS REGARDING ORDER CHANGES**

Air traffic managers shall ensure that facility air traffic personnel are verbally briefed on changes to FAAO JO 7110.65, Air Traffic Control, FAAO JO 7210.3, Facility Operation and Administration, and FAAO JO 7110.10, Flight Services, and other appropriate directives, that have operational/procedural significance.

## **2-2-12. SYSTEMS MANAGEMENT OF VSCS EQUIPMENT**

Air traffic facility managers shall determine which VSCS console equipment (VCE) positions require tailored checklists. The checklist shall include as a minimum, the configuration map in use and the specific position eligibility/capability (classmark) adapted to maintain operational continuity.

## **2-2-13. REPORTING EQUIPMENT TROUBLE**

Equipment trouble reports are normally delivered by air traffic personnel to Technical Operations

personnel in person or by telephone. Locally developed procedures that are agreed to jointly by the air traffic and Technical Operations managers may be used for trouble reporting. In the absence of locally developed procedures, the following shall apply: Trouble reports shall specify the facility, sector and position affected and include a brief description of the problem. In addition:

**a.** For air/ground communications problems, the frequency or frequencies affected shall be specified.

**EXAMPLE-**

*“Atlanta Sector 66R side 123.4 no transmit.”*

**b.** For air/ground communications problems, the calling and the called locations shall be specified.

**EXAMPLE-**

*“Seattle Sector 46D side hot line to Salt Lake City is not working.”*

## **2-2-14. FACILITY DIRECTIVES REPOSITORY (FDR)**

The Facility Directives Repository (FDR) provides a centralized, automated web-based library for FAA employees to access all Letters of Agreement (LOA), Standard Operating Procedures (SOP), and FAA Facility Orders (FO) for Air Traffic Facilities throughout the National Airspace System.

**NOTE-**

*Directive information for Flight Service Stations (LOAs, SOPs, FOs) will only be required for those located in Alaska.*

**a.** The Vice President’s responsibility includes:

**1.** The Vice President for En Route and Oceanic Services must develop processes within the service unit to ensure repository entry functions are discharged effectively.

**2.** The Vice President for Terminal Services must develop processes within the service unit to ensure repository entry functions are discharged effectively.

**3.** The Vice President for System Operations Services must administer user functions and develop processes within the service unit to ensure repository entry functions are discharged effectively.

**4.** The Vice President for Operations Planning Services must administer system functions, provide

access to the internet mirror site, and oversee the site operation and maintenance.

**5.** The Vice President for Safety Services oversees compliance.

**b.** Facility Managers must:

**1.** Ensure that current LOAs, SOPs and FOs are posted to the repository site.

**2.** Ensure that new and revised LOAs, SOPs and FOs are posted to the repository site before the effective date of the document.

**3.** Establish an internal administrative process to ensure the posting, completeness, and accuracy of their facility’s documents.

**4.** Ensure Classified, Contractor Propriety, and For Official Use Only information, is removed or excluded from posted documents.

**5.** Ensure that all outdated and cancelled documents are removed from the FDR database.

**c.** District Managers must:

**1.** Assist in the posting of documents, required in b1 and 2 above, for facilities that do not have FAA intranet access or automation capability.

**2.** Establish an administrative process to ensure facility compliance.

**3.** Ensure Classified, Contractor Propriety, and For Official Use Only information, is removed or excluded from posted documents.

**d.** Safety/Quality Assurance Offices must ensure facility compliance with posting LOAs, SOPs and FOs in the repository site in facility evaluation checklists.

**e.** The repository database is an intranet site within the FAA automation network firewall at <https://loa-faa.gov>.

**1.** Personnel with access to the FAA intranet may view documents without the need for a log-in or user account.

**2.** Personnel external to the firewall may view documents on a mirrored internet site with authorization by an FAA sponsor. Access to the mirror site requires a User ID and password that are valid for the period necessary to execute the sponsored activity. Contact information and instructions are available on the internet site.

**3.** Personnel responsible for maintaining the facility's documents must register with the site to establish a user account.

**4.** A facility may have up to three user accounts. User information is located in the user manual on the site's homepage.

**5.** Facility/District managers are the approving authority for user account privileges for their facilities.

**(a)** Users must complete an electronic registration page on the site to request access.

**(b)** The Facility/District manager will be notified via an email message when a user makes a request for account privileges. Approval must be made via the automated privilege link.

**(c)** Users will be notified of their approval by e-mail.

**(d)** Direct problems or questions to the facility point of contact identified on the facility homepage in the repository.



## Section 3. Air Traffic Familiarization/Currency Requirements for En Route/Terminal/Flight Service Facilities

### 2-3-1. GENERAL

It shall be the responsibility of the employees identified in para 2-3-2, Application, to adhere to the requirements of this section.

### 2-3-2. APPLICATION

a. Air traffic managers, assistant managers, operations support managers, and support specialists, who as a condition of employment are not required to maintain currency, shall maintain familiarity with operating positions to perform their required duties in an efficient manner.

b. First-level supervisors (including facility managers who also serve as first-level supervisors), ATCSs, developmental specialists, and air traffic assistants are required to maintain currency in order to perform their duties.

### 2-3-3. REQUIREMENTS

a. *Familiarization.* As a minimum, non-operational personnel (see application a) shall observe control room operations within their facility for 2 hours each week.

b. *Currency.* To maintain currency, personnel shall rotate through all positions on which they are certified each calendar month. Additionally, they shall meet the following minimum time requirements on control positions or operational positions, as appropriate, each calendar month:

1. First-level supervisors (including facility managers who also serve as first-level supervisors), and support specialists who are required to maintain currency by their air traffic managers:

(a) Radar/tower control/operational positions (excluding the operational supervisor in charge (OSIC) position): Four hours tower and four hours radar. If certified in only one area of operation (tower or radar), then a total of eight hours in that area.

(b) All other facilities: Eight hours in control/operational positions (excluding the OSIC position).

#### NOTE-

1. Although the OSIC position is an operational position, time working as an OSIC is not counted toward currency time.

2. Time working Flight Data communications, Flight Data, or Clearance Delivery positions does not count towards currency requirements.

2. Supervisory traffic management coordinators not covered in subpara b3 and traffic management coordinators are required to maintain currency and shall rotate through all positions on which they are certified each calendar month. Additionally, they shall work a minimum of eight hours per calendar month on control positions.

3. Supervisory traffic management coordinators at all ARTCCs and at A80, N90, PCT, NCT, and SCT are required to maintain currency and shall rotate through all positions within the Traffic Management Unit (TMU) only. Additionally, they shall work a minimum of eight hours per calendar month on these positions.

4. All other employees who are required to maintain currency:

(a) Radar/tower control/operational positions: Eight hours tower and eight hours radar. If certified in only one area of operation (tower or radar), a total of sixteen hours in that area.

(b) All other facilities: sixteen hours in control/operational positions.

5. ASR approach (where published): Three each calendar quarter; one of which must be a no-gyro. Radar simulation may be used to satisfy these requirements.

### 2-3-4. DIFFERENTIAL

To qualify for currency differential as outlined in the Air Traffic Control Revitalization Act, personnel shall be certified and maintain currency on at least two positions excluding clearance delivery and flight data positions.





## Section 6. Watch Supervision–Terminal/En Route

### 2–6–1. WATCH SUPERVISION

a. Watch supervision requires maintaining situational awareness (defined below) of traffic activity and operational conditions in order to provide timely assistance to specialists and that ensure available resources are deployed for optimal efficiency. Watch supervision may be performed by a manager, supervisor, or controller-in-charge (CIC). The objectives and tasks of watch supervision shall be specified in a facility directive, which is focused on operational requirements. The directive shall specify, as a minimum, the required tasks for maintaining a safe and efficient operation. These tasks shall include, but are not limited to:

1. The requirement to provide guidance and goals for the shift.
2. Monitoring/managing traffic volume/flow.
3. Position assignments.
4. Position relief.
5. Training assignments.
6. Processing leave requests (e.g., leave approval).
7. Configuring/monitoring/reporting equipment status.
8. Data collection and reporting.
9. Monitoring presidential aircraft and reporting security requirements.
10. Situational awareness is defined as a continuous extraction of environmental information, integration of this information with previous knowledge to form a coherent mental picture, and the use of that picture in directing further perception and anticipating future events. Simply put, situational awareness means knowing what is going on around you.
11. Management of the operational environment with a goal toward eliminating distractions.
12. Administrative duties must not be accomplished to the detriment of any operational duty.

**NOTE-**

*Individuals medically disqualified or taking medically disqualifying substances shall not be assigned watch*

*supervision duties, in accordance with para 2-8-6, Restricted Drugs.*

b. In the role of watch supervision, a CIC must perform these duties in accordance with management direction, with the following exceptions:

1. Evaluating and counseling employees on their performance.
2. Recommending selections, promotions, awards, disciplinary actions, and separations.
3. Site Coordinator for drug or alcohol testing.

**NOTE-**

*On-the-spot corrections are not considered an evaluation of performance and are required as part of CIC duties.*

### 2–6–2. WATCH SUPERVISION ASSIGNMENTS

a. Efficient air traffic services require watch supervision regardless of the number of people assigned. Facilities shall establish local procedures for watch supervision assignments.

b. Where authorized, when two or more operations managers are assigned to the shift, one must be designated as the Operations Manager in Charge (OMIC). The OMIC is responsible for the day-to-day, shift by shift, management of the control room operation.

c. When two or more supervisory traffic management coordinators (STMC) are on duty, one shall be assigned as supervisory traffic management coordinator-in-charge (STMIC).

d. When two or more operations supervisory personnel are on duty in an operational area (for example, radar room, tower, ARTCC area, etc.), one must be assigned as in charge.

**NOTE-**

*These “in charge” personnel may be called OSIC, front line manager-in-charge (FLMIC), or other names designated by the facility manager.*

e. When two or more specialists are on duty and no supervisory personnel are available, one specialist who is fully qualified and rated in the assigned operational area shall be designated as CIC to perform the watch supervision duties.

**NOTE-**

*In combined radar/tower facilities, when there's a tower*

*CIC and TRACON CIC, one shall be designated as the overall controller-in-charge (OCIC).*

**f.** At facilities where a specialist stands a watch alone, the responsibility for watch supervision becomes part of his/her duties.

**g.** Personnel performing watch supervision duties may be required to perform operational duties in addition to watch supervision duties. The performance of operational duties should be done on a limited basis such as during periods of low activity.

**h.** An individual is considered available for watch supervision when he/she is physically present in the operational area and is able to perform the primary duties of the function. If the supervisor/CIC leaves the operational area or is engaged in an activity which will interfere with or preclude the performance of watch supervision duties, then another qualified individual must be designated to supervise the watch.

### **2-6-3. CONTROLLER-IN-CHARGE (CIC) DESIGNATION**

**a.** Prior to being designated as a CIC, specialists shall meet the following prerequisites:

**1.** Have been certified for 6 months in the area/facility CIC duties to be performed. (The Director of En Route and Oceanic Operations Area Office or Terminal Operations Service Area Office may issue a facility waiver for the 6 month requirement where a more immediate assignment is needed. Waivers to facilities will be for 1 year, with renewals based on the result of a yearly evaluation by the area office director.)

**2.** Be operationally current.

**3.** Be selected by the air traffic manager or his/her designee.

**4.** Successfully complete CIC training.

**b.** Specialists who have been designated as a CIC and subsequently transfer to another facility are not required to fulfill the requirement of subpara 2-6-3a1 at the new facility; however, they must meet all other prerequisites.

#### **NOTE-**

*In combined radar/tower facilities, specialists who are certified in the tower cab may be designated as CIC in the tower, provided all of the above prerequisites are met.*

### **2-6-4. CONTROLLER-IN-CHARGE (CIC) SELECTION PROCESS**

**a.** All eligible employees who meet the prerequisites of subparas 2-6-3a1 and 2 shall be considered for selection as CIC. Air traffic managers, when determining facility requirements for CICs, shall consider the following:

- 1.** Facility operational needs.
- 2.** Scheduling concerns.
- 3.** Staffing concerns.
- 4.** Special events.
- 5.** Other issues.

**b.** When facility requirements are established, air traffic managers may designate a panel to forward recommendations for CIC candidates to the designated selecting official. A facility may have one recommendation panel for each area of specialization.

**c.** The recommendation panel shall consider the following knowledge, skills, and abilities (KSA) in reviewing each candidate. These KSAs shall include but are not limited to:

- 1.** Problem solving and analytical ability.
- 2.** Planning and organizing.
- 3.** Decisiveness.
- 4.** Judgement.
- 5.** Communication skill.
- 6.** Interpersonal skill.

**d.** The recommendation panel shall forward its recommendations to the air traffic manager or his/her designee. Written feedback shall be provided to the selecting official for all candidates not recommended including dissenting opinions.

**e.** Candidates who are not selected to be a CIC, upon request, shall be advised of the reasons for nonselection. If applicable, specific areas the employee needs to improve shall be identified. Employees may request assistance from their immediate supervisor in developing options to improve the identified areas.

### **2-6-5. CONSOLIDATING POSITIONS**

**a.** Assign personnel to positions as required by activity, equipment, and facility function. Positions

may be consolidated in consideration of activity and the qualifications of the personnel involved.

**b.** To the extent staffing resources permit, and where the position is established, the tower associate (local assist) position shall be staffed. This position is considered essential to the operational integrity and safety levels required to minimize the potential for surface errors and land-over incidents. Nonlocal control functions shall not be consolidated/combined at the local control position except during periods of significantly reduced traffic levels.

**c.** When conducting line up and wait (LUAW) operations, local control position must not be consolidated/combined with any other non-local control position.

**REFERENCE-**

*FAAO JO 7210.3, Para 10-3-8, Line Up and Wait (LUAW) Operations*

## **2-6-6. RELIEF PERIODS**

**a.** Personnel performing watch supervision duties are responsible for ensuring that breaks are administered in an equitable manner and applied so as to promote the efficiency of the agency. They are also responsible for ensuring that breaks are of a reasonable duration.

**b.** Personnel performing watch supervision duties are responsible for knowing the whereabouts of employees to ensure their availability for position assignments.

**c.** Personnel performing watch supervision duties shall not condone or permit individuals to sleep while on duty. Any such instance shall be handled in accordance with FAPM 2635, Conduct and Discipline.

## **2-6-7. BASIC WATCH SCHEDULE**

**a.** Facility watch schedules shall take into account normal traffic flow, thereby permitting the posting of a continuing schedule for an indefinite period of time. Facility management is responsible for ensuring watch schedules are in accordance with collective bargaining agreements.

**b.** Air traffic control specialists whose primary duties are those directly related to the control and separation of aircraft must meet the following criteria:

**1.** Do not work more than 10 operational hours in a shift.

**2.** Hours worked before a shift, whether operational or not, will count as operational hours.

**3.** All work beyond 10 hours must be nonoperational.

**4.** Have at least an 8-hour break from the time work ends to the start of any subsequent shift.

**5.** Have an off-duty period of at least 12 hours following a midnight shift. (A midnight shift is defined as a shift in which the majority of hours are worked between 10 p.m. and 8 a.m.)

**6.** Do not work more than six shifts without taking a regular day off.

**7.** Authorized leave, compensatory time used, and credit hours used are considered hours of work.

**8.** These criteria apply to shift adjustments, including the exchange of shifts and/or days off and the change of shifts and/or days off.

## **2-6-8. OVERTIME DUTY**

Facility air traffic managers shall ensure that overtime duty is equitably distributed among all eligible employees who desire it. Retain overtime duty records for 12 months.

## **2-6-9. HOLIDAY STAFFING**

**a.** Facility Air Traffic Managers shall ensure that the scheduled staffing is adjusted on holidays to a level consistent with the anticipated workload. Application of this policy is not intended to result in a standardized holiday staffing schedule for all holidays. Holiday staffing schedules may vary for individual holidays since the traffic in a particular area cannot always be expected to be the same for each holiday.

**b.** Prior to establishing work schedules for a Federal holiday, facility air traffic managers shall:

**1.** Consider the previous year's traffic statistics for each holiday.

**2.** Check, as appropriate, with local sources (Air National Guard, USN, USAF Reserves, local flying schools, fixed base operators, etc.), for information concerning anticipated activity.

**2-6-10. ADMINISTRATIVE HOURS OF DUTY**

Hours of duty of facility air traffic managers and administrative staffs should conform with the duty hours of their respective service area office.

**2-6-11. FACILITY COMPLEMENTS**

Facility air traffic managers will be currently informed by the service area office of their authorized facility personnel complements. The authorized complement will always be the end-of-year employment ceiling authorization. Circumstances may result in the establishment of a complement different from that provided in workload formulas.

**2-6-12. CONSOLIDATING TOWER/TRACON FUNCTIONS**

- a. At facilities where both tower and radar/non-

radar approach control services are provided, the air traffic manager must ensure, to the maximum extent possible, that these functions are not consolidated unless unforeseen circumstances or emergency situations arise which would preclude compliance with this paragraph.

- b. During midwatch operations (between 2230 and 0630 local time), when traffic is very light, all functions may be consolidated for short meal or physiological breaks.

- c. At facilities with a tower only operation and staffing of only one Certified Professional Controller (CPC), coordination must be accomplished with the facility providing radar/nonradar approach control services to the airport before the CPC can leave the operational quarters for physiological breaks. This should only be done during periods of light to zero traffic.

## Section 4. Recorders

### 3-4-1. USE OF RECORDERS

**a.** Air traffic facilities shall record operational communications to the maximum extent practicable.

**b.** Record at each operating position to include all data transmitted and/or received via radio, telephone, VSCS, or automated means such as Mode S, Data Link, and satellite. Facility management shall advise operating positions when the recording equipment associated with these positions is not operating or otherwise unavailable for recording. Facility management shall then ensure that a written record, or equivalent, to the extent possible, is made for all IFR clearances.

**c.** If combined positions are periodically split into individual positions, record them on separate channels when so used.

**d.** Supervisors shall ensure that the proper FAA/telephone company (TELCO) “jacks” are used to obtain the required recording at facilities with dual capability.

**e.** Use a separate channel on each recorder to record time at facilities with time-announce systems. Where these systems have not been installed, a spare receiver tuned to a time transmitting station may be used.

**f.** Operational voice recorders shall be provided a time source.

**g.** Except as noted in para 3-4-2, Assignment of Recorder Channels, record with regard to the position in lieu of the function. All headset audio on a position shall be recorded on a single channel. In facilities so equipped, all FAA-speaker audio shall be recorded on the “radio only” jack channel. If a “radio only” jack is not available, another channel may be used.

**h.** Reserve one channel of each recorder for recording time; except two channels shall be reserved on the FA5394, 30-channel recorder. If a coded time source and a time code reader are available, record the coded time source in preference to voice time announcements. Recording more than one time source on any recorder is prohibited.

**i.** Each FSS collocated with an ARTCC will use the center’s voice recorder system resources to

minimize requirements for spare parts, test equipment, and routine maintenance.

**j.** Recorders may be used to monitor any position for evaluation, training, or quality control purposes.

**k.** Air traffic managers should develop procedures to ensure that frequencies are not recorded when facilities are officially closed.

### 3-4-2. ASSIGNMENT OF RECORDER CHANNELS

**a.** Assign position recording channels in the following order of priority:

#### 1. ARTCCs:

- (a) Radar controller.
- (b) Sector controller.
- (c) Radar handoff controller.
- (d) Radio controller.
- (e) Coordinator.
- (f) Supervisor.
- (g) Traffic Manager.
- (h) Flight data.
- (i) Data systems coordinator.
- (j) Mission coordinator.
- (k) AMIS controller.

#### 2. Terminals:

- (a) Arrival control.
- (b) Departure control.
- (c) Local control.
- (d) Precision approach radar.
- (e) Clearance delivery.
- (f) Ground control.
- (g) Inbound flight data.
- (h) Outbound flight data.
- (i) Direction-finding.
- (j) Supervisory.

(k) Automatic terminal information services (ATIS) – air traffic managers shall designate a channel to record ATIS when a separate channel is not available. Record the ATIS message once at the time of preparation on the designated channel. Make a written record of each ATIS and retain for 15 days if a recorded channel is not available.

**3. FSSs/AFSSs:**

- (a) Flight watch.
- (b) Inflight.
- (c) Preflight.
- (d) Flight data.
- (e) Supervisory.

**4. ATCSCC:**

- (a) National Operations Manager (NOM).
- (b) National Traffic Management Officer (NTMO).
- (c) National Traffic Management Specialist (NTMS) operating position.

b. You may use existing remaining spare recording channels to record the primary radio frequencies of positions using the same priority stated above.

**3-4-3. CHECKING AND CHANGING REORDING EQUIPMENT**

a. At En Route facilities and the ATCSCC, Technical Operations personnel must be responsible for checking and changing recorder tapes, digital audio tapes (DAT), and Digital Audio Legal Recorders (DALR).

**REFERENCE-**  
(Analog) FAAO JO 6670.4, *Maintenance of Multichannel Recorder Equipment,*

or

(Digital) FAAO JO 6670.13, *Maintenance of Digital Voice Recorder (DVR) Equipment and FAAO JO 6670.15, Maintenance of Digital Voice Recorder System Series II (DVR II) Equipment.*

b. At terminal and flight service facilities:

1. Where recorders are not convenient to operating quarters, the facility air traffic manager and the Technical Operations local manager must develop an agreement assigning the responsibility for

checking and changing recorder tapes, DATs, and DALRs.

2. Where recorders are convenient to operating quarters, air traffic personnel must perform recorder checks.

c. If air traffic personnel check and change tapes, DATs, or DALRs, the facility air traffic manager must ensure that personnel are trained in the proper methods to be used.

d. Recorder monitor operation checks on analog voice recorder systems must be performed daily and must not exceed 26 hours between checks. Procedures for monitoring operations in analog recorders are described in FAAO JO 6670.4, *Maintenance of Multichannel Recorder Equipment.*

1. On a daily basis (not to exceed 26 hours), validate the Nicelog supervision window for alarms, and verify normal operation of equipment on digital audio tapes.

2. Indicate accomplishments of checks on FAA Form 7230-4, Facility Record of Operation.

e. At facilities using DALR:

1. On a daily basis (not to exceed 26 hours), validate the Castle Rock SNMPC window for the alarms, and verify normal operation of the DALR system.

2. Document the accomplishment of the check on FAA Form 7230-4, Facility Record of Operation.

**3-4-4. HANDLING RECORDER TAPES, DATs, OR DALR STORAGE**

a. Place the following information on each reel or DAT storage case before storage:

- 1. The recorder number.
- 2. The date and the time UTC.
- 3. The initials of the person changing the reel.

b. Retain the tapes or DATs for 45 days, and ensure the DALR .wav file is set to retain recordings for 45 days, except:

1. En route facility utilizing system analysis recording tapes as their radar retention media (regardless of the type of voice recorder system being used) must retain voice recordings for 15 days.

2. Those facilities utilizing an analog voice recorder system must retain voice recordings for 15 days.

3. The David J. Hurley Air Traffic Control System Command Center must retain voice recordings for 15 days.

4. Accidents: Retain the tapes, DATs, or DALRs in accordance with FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting.

5. Incidents: Retain the tapes, DATs, or DALRs in accordance with FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting; and FAAO 1350.15, Records Organization, Transfer, and Destruction Standards.

6. Hijacking: Retain all relevant tapes, DATs, or DALRs of hijackings from the time communication commences with the aircraft until communication has terminated. After 3 years, contact System Safety and Procedures for the release of the tapes, DATs, or DALRs. In every case, a release from System Safety and Procedures is required to return hijack tapes, DATs, or DALRs to service.

### 3-4-5. VSCS DATA RETENTION

a. Retain the VSCS cassette, disc, and tape recordings and data communications/console type-writer printouts for 15 days unless they are related to an accident/incident as defined in accordance with FAAO 1350.15, Records Organization, Transfer, and Destruction Standards, Chapter 11, Section 8020.

b. If a request is received to retain the VSCS communications traffic listings and the system

configuration and/or mapping data following an accident, the printout of the relative data will suffice, and the VSCS cassette, disc, and/or tape may then be returned to service through the normal rotational cycle. The printout data are considered a permanent record and shall be retained in accordance with aircraft accident/incident retention requirements. Reduction of the VSCS cassette, disc, and tape recordings to hard-copy format shall be made at the earliest time convenient to the facility involved without derogating the ATC function and without prematurely taking the VSCS out of ATC service. Do not make these data and printouts a part of the accident/incident package.

c. If a request is received to retain a specific data recording and the data is available and contained on VSCS cassette, disc, and/or tape, the VSCS cassette, disc, and/or tape shall be retained in its entirety. If the data requested is contained on several different media (e.g., VSCS cassette, disc, and/or tape media), the facility may transfer all pertinent data to a common media and label the media a Duplicate Original. After successful transfer, the original VSCS cassette, disc, and/or tape may be returned to service through the normal rotational cycle. However, if a specific request is received to retain the original VSCS cassette, disc, and/or tape, the original VSCS cassette, disc, and/or tape shall be retained in its entirety.

d. Treat the VSCS cassette, disc, tape, duplicate originals, and data communications/console type-writer printouts related to hijack aircraft the same as voice recorder tapes. (See para 3-4-4, Handling Recorder Tapes or DATs).





## Section 9. Other Displays

### 3-9-1. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) FOR FACILITIES PROVIDING TERMINAL APPROACH CONTROL SERVICES

Air traffic managers shall determine the location and the method for the display of vectoring altitude charts to provide controllers with the minimum vectoring altitudes as follows:

a. Where the system is adapted to display single radar sensors, provide:

1. An MVAC that accommodates the largest separation minima of all available sensors; or

2. Unique MVACs that accommodate the appropriate separation minima of each available sensor.

b. Where the system is adapted to simultaneously display multiple radar sensors, provide an MVAC that accommodates the largest separation minima of all available sensors.

c. Where the system is adapted to display multiple radar sensors in a priority sequence (for example, sort boxes), provide an MVAC that accommodates the largest separation minima of adapted sensors.

#### NOTE-

*Technical Operations Aviation System Standards, National Flight Procedures Group should be contacted if assistance is required. (See FAAO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS) Chapter 10.)*

#### REFERENCE-

*FAAO JO 7110.65, Para 5-5-4, Minima.*

### 3-9-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS)

Prepare a vectoring chart in accordance with the criteria contained in FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

a. MVACs must be developed and maintained using the Sector Design and Analysis Tool (SDAT). Facility Managers may request assistance in the development and maintenance of their MVAC or request SDAT user support by soliciting the Mission

Support Services Services, Geographic Services Group. MVACs developed in SDAT properly apply obstruction clearance criteria required by FAA Order 8260.3. SDAT completes FAA Form 7210-9 and automatically creates and sends the necessary data files to Mission Support Services, ATC Products Group upon certification.

#### NOTE-

*MVAs are established without considering the flight-checked radar coverage in the sector concerned. They are based on obstruction clearance criteria and controlled airspace only. It is the responsibility of the controller to determine that a target return is adequate for radar control purposes.*

b. At a minimum, the airspace considered for providing obstacle clearance information on MVA charts must accommodate the facility's delegated area of control as well as adjacent airspace where control responsibility is assumed because of early handoff or track initiation.

c. MVACs may be subdivided into sectors to gain relief from obstacles that are clear of the area in which flight is to be conducted. There is no prescribed limit on the size, shape, or orientation of the sectors.

d. Depict the sectors in relationship to true north from the antenna site.

e. Facility requests for reduced required obstruction clearance (ROC) in an area designated as mountainous in accordance with 14 CFR, Part 95, Subpart B, must conform to the following procedures:

1. Designated mountainous terrain must be evaluated for precipitous terrain characteristics and the associated negative effects. Facility managers must use FAA Order 8260.3, paragraph 1720, as a guide when considering ROC reductions in designated mountainous areas. ROC reductions are not authorized where negative effects of precipitous terrain are documented or known having followed the process contained in subparas e2 and 3 below. ROC reductions within designated mountainous areas are only authorized by complying with at least one of the following criteria:

#### REFERENCE-

*FAA Order 8260.3, Appendix 1, Glossary Term, Precipitous Terrain.*

(a) Where lower altitudes are required to achieve compatibility with terminal routes.

(b) To permit vectoring within the airport radar traffic pattern area for either a departure procedure, an instrument approach procedure, or a visual approach to an airport. Air traffic managers must define each airport's radar traffic pattern area for which ROC reductions are sought. These areas must include sufficient maneuvering airspace necessary for ATC sequencing and spacing of traffic in the vicinity of an airport.

2. Where mountainous terrain has been deemed precipitous by the air traffic facility, each ROC reduction request must include a query to an independent data source, such as NASA's Aviation Safety Reporting System to determine if any ground proximity warnings have been reported in the subject area. After completing the query, consider the facility's history and experiences with turbulence at the minimum altitude requested. Avoid ROC reductions where reported ground proximity warnings relate to both existing MVA sector altitude ROC reductions and rapid terrain elevation changes. ROC reduction requests in these areas may require additional evaluation and review.

**REFERENCE-**

FAA Order 8260.3, Appendix 1, Glossary Term, Precipitous Terrain.

3. The facility MVAC package must include a detailed account of the steps taken by the facility to determine if the sector will qualify for taking a ROC reduction in the sector. This data will be reviewed by the Service Center Operations Support Group (OSG) and the ATC Products Group personnel for ROC reduction approval. Service Center Operations Support personnel must be the approving authority for ROC reduction criteria compliance with paragraph e1(a) and (b) above. Previously approved reductions in ROC justifications must be resubmitted for approval during a facility's recurring certification process.

**NOTE-**

Should a ROC reduction request be denied by Service Center Operations Support personnel, the manager may appeal the decision to Terminal Safety and Operations Support for review.

4. In the advent of the development of an automated precipitous terrain algorithm certified by AFS, the automated method will be used in lieu of the manual method described above.

5. Ensure MVA areas submitted for ROC reductions do not cover large geographical areas that include locations that would not, individually, meet ROC reduction standards. In such cases, the ATC Products Group may work with the Service Center and the facility to design a sector that will pass the approval process for a particular approach/departure route.

6. Whenever a ROC reduction is taken, the rationale/justification for taking the ROC reduction as defined in subpara e1 must be included in the MVAC package by facility managers.

7. ROC reductions should only be requested when there is a demonstrated operational need, and in no event will requested reductions result in an MVA that does not comply with 14 CFR 91.177.

f. An assumed adverse obstacle (AAO) additive is required in areas not designated as mountainous (ROC 1,000 feet) and in designated mountainous terrain areas when any ROC reduction is requested.

g. Where an operational need is demonstrated and documented, managers are permitted to round a resulting MVA with an AAO additive to the nearest 100-foot increment, provided the minimum ROC is maintained for other non-AAO obstacles. For example, 3,049 feet rounds to 3,000 feet to support glide slope intercept requirements.

h. Managers requesting to waive criteria contained in FAA Order 8260.3, must submit FAA Form 8260-1, Flight Procedures/Standards Waiver in conjunction with the MVA project. This waiver form will contain the criteria requested to be waived, with the operational need fully explained, and examples of how the facility will achieve an equivalent level of safety, if approved. The package will be sent to the ATC Products Group through the Service Center OSG. Upon completion of the ATC Products Group review, the package will be forwarded to the Flight Procedure Implementation and Oversight Branch. For the Flight Standards waiver process, facility managers do not need to complete a Safety Management System evaluation. An electronic copy of the completed waiver package must be sent to Terminal Safety and Operations Support.

i. MVAs must not be below the floor of controlled airspace and should provide a 300-ft buffer above the floor of controlled airspace. In some cases, this application will result in an exceptionally high MVA (for example, in areas where the floor of controlled

airspace is 14,500 MSL). When operationally required to vector aircraft in underlying Class G (uncontrolled) airspace, 2 MVAs may be established. The primary MVA must be based on obstruction clearance and the floor of controlled airspace. A second, lower MVA that provides obstruction clearance only may be established. The obstruction clearance MVA must be uniquely identified; for example, by an asterisk (\*). Do not consider buffer areas for controlled airspace evaluations.

**j.** If new charts prepared using SDAT create a significant impact on a facility's operation, the impact must be coordinated with ATO Terminal Safety and Operations Support for joint coordination with System Operations.

**NOTE-**

*Significant impacts include changes to flight tracks for turbine-powered aircraft, multiple losses of cardinal altitudes, and/or reductions in airport arrival/departure rates.*

**k.** Air traffic managers may request to merge adjoining, like altitude MVA sectors that resulted from using differing design criteria provided the merged sectors are identified in the remarks on FAA Form 7210-9 and a statement is included with each affected sector that the merged sectors are for Radar Video Map (RVM) presentation only; for example, Sector B, B1, and B2 are to be merged in SDAT shape files for RVM presentation only.

**l.** Air traffic managers must submit the request for MVACs to the appropriate Service Center OSG for review. The Service Center OSG must then forward the requested MVAC to the ATC Products Group for processing.

**m.** Each request must indicate the MVAC was accomplished in SDAT and stored in the SDAT repository.

**n.** Each request must include the SDAT generated Form 7210-9 with the manager's signature and point of contact at the submitting facility. Form 7210-9 must also be an electronic copy with the manager's signature, and imported into the MVA project file. When applicable, each Form 7210-9 must include explanations/justifications for both ROC reduction and AAO additive rounding requests. The MVA request with Form 7210-9 may be electronically forwarded to the OSG but must be followed with a

hard copy with original signatures. However, when the capability of electronic signatures is developed within SDAT, Form 7210-9 will be transmitted electronically between the facility, Service Center, and ATC Products Group in lieu of the paper process. SDAT will automatically store the approved MVAC package in the National Airspace System Resource (NASR).

**o.** For those facilities that use the SDAT program office for the development and maintenance of their MVACs, the SDAT program office personnel must be notified to complete the final submission step of the project within the repository when sending the MVAC request to the OSG.

**p.** When more than one chart is used, prepare those charts with the oldest review/certification date(s) first to help avoid lapses in annual review/certification requirements.

**q.** New charts that result in significant operational impacts must not be implemented by air traffic managers until associated changes to facility directives, letters of agreement, and controller training are completed within a period not to exceed 6-months from new chart certification.

**r.** Once a chart without significant operational impacts has been approved, it must be implemented as soon as possible. MVAC installations projected to be more than 60 days from date of approval must be coordinated with and approved by the Service Center OSG.

**s.** Air traffic managers must ensure that MVACs are periodically reviewed for chart currency and simplicity and forwarded for certification to the ATC Products Group at least once every 2 years. Charts must be revised immediately when changes affecting MVAs occur.

### **3-9-3. ALTITUDE ASSIGNMENTS TO S/VFR AND VFR AIRCRAFT**

Where procedures require altitude assignments to S/VFR and VFR aircraft less than the established IFR altitude or MVA, facility air traffic managers shall determine the need and the method for displaying the appropriate minimum altitude information.

**REFERENCE-**

*FAAO JO 7110.65, Para 7-5-4, Altitude Assignment.  
FAAO JO 7110.65, Para 7-8-5, Altitude Assignments.*

### 3-9-4. EMERGENCY OBSTRUCTION VIDEO MAP (EOVM)

**a.** An EOVM shall be established at all terminal radar facilities that have radar coverage in designated mountainous areas and an available channel in their video mappers. This map is intended to facilitate advisory service to an aircraft in an emergency situation wherein an appropriate terrain/obstacle clearance minimum altitude cannot be maintained. (See FIG 3-9-1.)

**NOTE-**

**1.** Designated mountainous areas are identified in 14 CFR Part 95, Subpart B.

**2.** Appropriate terrain/obstacle clearance minimum altitudes may be defined as MIA, MEA, Minimum Obstruction Clearance Altitude (MOCA), or MVA.

**b.** Alternatives, such as combining existing maps, eliminating a lower priority map or, as a least desirable alternative, merging the EOVM with the MVA map, shall be considered when necessary to accommodate the EOVM.

**c.** EOVM Use: The EOVM shall be used and the advisory service provided only when a pilot has declared an emergency or a controller determines that an emergency condition exists or is imminent because of the inability of an aircraft to maintain the appropriate terrain/obstacle clearance minimum altitude/s.

**d.** EOVM Design:

**1.** The basic design of the EOVM shall incorporate the following minimum features:

**(a)** Base contour lines of the mountains with the highest peak elevation of each depicted mountain plus 200 feet for natural low obstacle growth.

**(b)** Highest elevations of adjacent topography; e.g., valleys, canyons, plateaus, flatland, etc., plus 200 feet, or water.

**(c)** Prominent man-made obstacles; e.g., antennas, power plant chimneys, tall towers, etc., and their elevations.

**(d)** Satellite airports and other airports which could serve in an emergency.

**(e)** MVA if the EOVM must be merged with the MVA map for the former to be accommodated.

**(f)** Other information deemed essential by the facility.

**NOTE-**

To avoid clutter and facilitate maintenance, information depicted on the EOVM should be restricted to only that which is absolutely essential.

**2.** All elevations identified on the EOVM shall be rounded up to the next 100-foot increment and expressed as MSL altitudes.

**NOTE-**

To avoid unnecessary map clutter, the last two digits are not required.

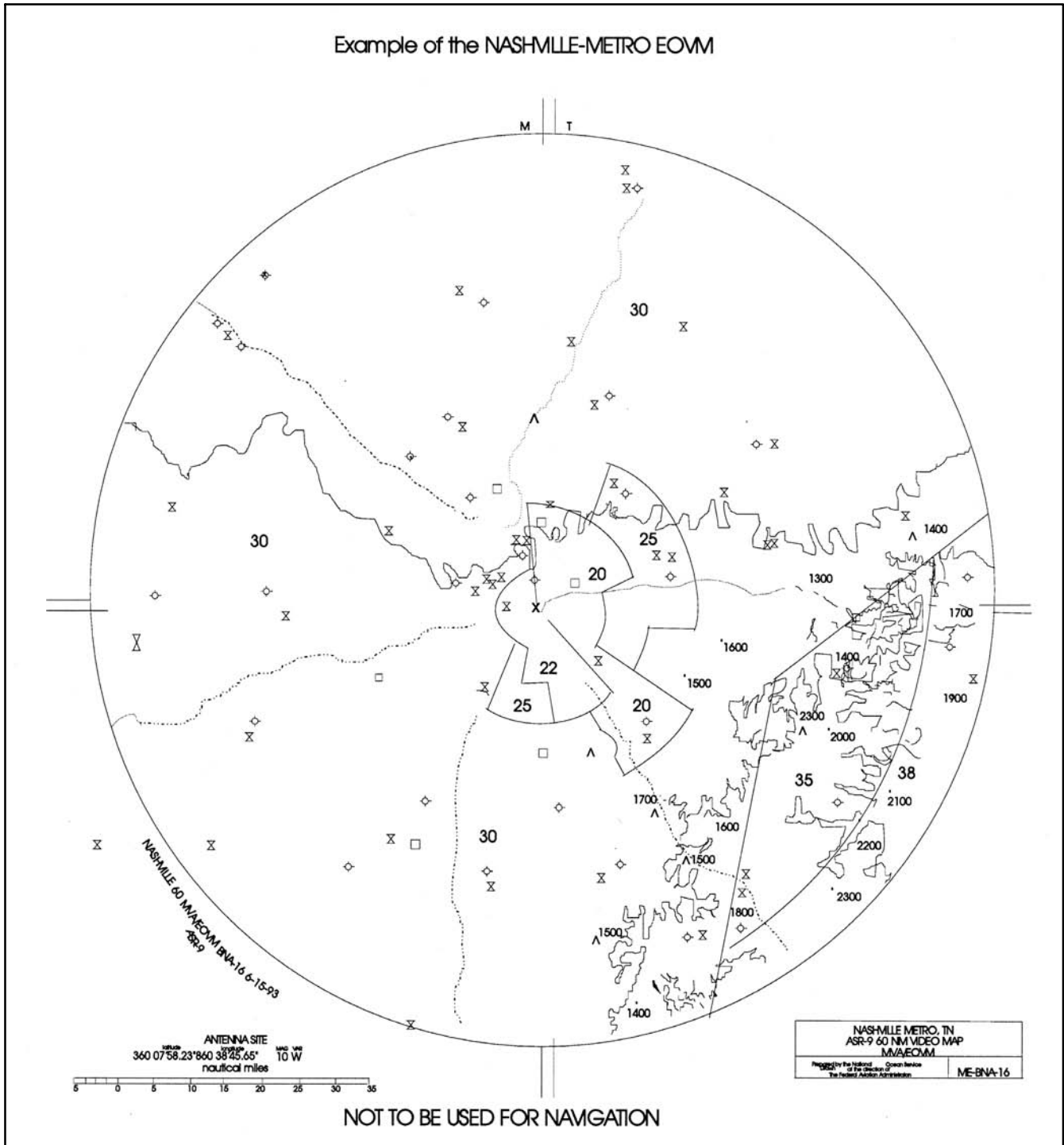
**EXAMPLE-**

2=200, 57=5700, 90=9000, 132=13200

**e.** EOVM Production: The preparation and procurement of the EOVM shall be accomplished in accordance with FAAO 7910.1, Aeronautical Video Map Program.

**f.** EOVM Verification: The original EOVM procurement package and any subsequent changes shall be checked for adequacy and then coordinated with the Terminal Procedures and Charting Group to verify the accuracy of its information. Annually, the EOVM shall be reviewed for adequacy and re-coordinated with the Mission Support Services, Terminal Procedures and Charting Group for accuracy.

FIG 3-9-1  
EOVM



### 3-9-5. ESTABLISHING DIVERSE VECTOR AREA/S (DVA)

a. DVAs may be established at the request of the ATM and coordinated jointly with the appropriate Service Area OSG and Mission Support Services, Terminal Procedures and Charting Group for candidate airports within the facility's area of jurisdiction. DVAs should be considered when an obstacle(s) penetrates the airport's diverse departure obstacle clearance surface (OCS). The OCS is a 40:1 surface and is intended to protect the minimum climb gradient. If there are no obstacle penetrations of this surface, then standard takeoff minimums apply, obstacle clearance requirements are satisfied and free vectoring is permitted below the MVA. When the OCS is penetrated, the Terminal Procedures and Charting Group procedural designer will develop an obstacle departure procedure (ODP). An ODP may consist of obstacle notes, non-standard takeoff minimums, a specified departure route, a steeper than normal climb gradient, or any combination thereof. If an ODP is developed for a runway, it is a candidate for a DVA. The ATM should consider whether a DVA is desired and then consider if development would provide operational benefits exceeding existing practices. This is done after determining that sufficient radar coverage exists for any given airport with a published instrument approach. When established, reduced separation from obstacles, as provided for in TERPS diverse departure criteria, will be used to radar vector departing IFR aircraft below the MVA. To assist in determining if obstacles penetrate the 40:1 surface, ATMs may request the Terminal Procedures and Charting Group provide them with a graphic depiction of any departure penetrations in addition to completing the following steps:

1. If the location is listed in the Terminal Procedure Publication (TPP) index, check the take-off minimums and (Obstacle) Departure

Procedures in section C of the TPP for the DVA runway. If nothing is listed, or only obstacle notes appear, then a DVA is not necessary. If a DP appears, development of a DVA becomes an option.

2. If the location is not listed, query the NFDC Web site at <http://nfdc.faa.gov>, and select the Special Procedures link to determine if a "special" instrument approach procedure exists at that airport/heliport. If there is a special procedure, the Regional Flight Standards All Weather Office (AWO) can supply FAA Form 8260-15A for ODP information when requested by the facility.

**NOTE-**

*If the TPP or AWO indicates IFR departures N/A for any given runway, then a DVA is not authorized.*

3. If the ATM elects to request a DVA, use the sample memorandum below as a guide (see FIG 3-9-2). Specify if the request is to establish, modify, or cancel a DVA. If modifying or canceling a DVA, attach the memorandum that authorizes the current DVA. The DVA request must include the following:

(a) Airport identifier.

(b) Desired DVA runway(s).

(c) Requested DVA method. Specify a range of operational headings by starting from the extreme left heading proceeding clockwise (CW) to the extreme right heading as viewed from the departure runway in the direction of departure (for example, Runway 36, 330 CW 030), or isolate a penetrating obstacle(s) by identifying that obstacle(s) either by DOF number or range/bearing from airport.

(d) Maximum Extent (Distance) from Departure Runway.

(e) Radar Type/Beacon Type. Provide whether the facility has an ASR-9 with Mode S beacon system.

(f) Facility Hours of Operation.

FIG 3-9-2  
Sample DVA Memo



## Federal Aviation Administration

---

# Memorandum

Date: March 10, 2011

To: John Bickerstaff, Manager, Terminal Procedures and Charting Group, AJV-35  
 THRU: Mark Ward, Manager, Eastern Operations Support Group, AJV-E2

From: Steve Jones, Air Traffic Manager, XYZ TRACON

Prepared by: Joseph B. Specialist, Support Specialist

Subject: Diverse Vector Area (DVA) Request

---

XYZ TRACON requests the following DVA action as specified for the following airport(s) based on the information provided below:

| <u>ACTION</u> | <u>AIRPORT</u> | <u>RWY</u> | <u>REQUESTED DVA METHOD</u>                         | <u>DIST FROM RWY</u> |
|---------------|----------------|------------|---|----------------------|
| ESTABLISH     | KABC           | 35R        | <b>Range of Headings</b><br>320 CW 020              | Within 18NM          |
| ESTABLISH     | KABC           | 17L        | <b>Range of Headings</b><br>140 CW 200              | Within 20NM          |
| MODIFY        | KXYZ           | 15         | <b>Isolate Penetrating Obstacle</b><br>DOF 05-00234 |                      |
| CANCEL        | KDEF           | 22         |   |                      |

Radar Type/Beacon Type: ASR-8 with ATCBI-5

Hours of Operation: 0600-2300 local

POC is Joe Specialist, XYZ TRACON, 416-555-9988.

Attachments:

1. KXYZ DVA authorization memorandum dated October 28, 2008.
2. KDEF DVA authorization memorandum dated February, 16, 2009.

**b.** Forward DVA requests to the Terminal Procedures and Charting Group through the appropriate Service Area OSG Manager.

**c.** When a DVA is established, it will be documented and provided to the facility by the Terminal Procedures and Charting Group on FAA Form 8260-15D, Diverse Vector Area (DVA). The ATM must then prepare a facility directive describing procedures for radar vectoring IFR departures below the MVA including:

**1.** Textual or graphical description of the limits of each airport's DVA for each runway end.

**2.** Where required, specific radar routes, depicted on the radar display, where radar vectors are provided to aircraft below the MVA.

**3.** Free vectoring areas, in which random vectoring may be accomplished below the MVA.

**d.** IFR aircraft climbing within a DVA must not be assigned an altitude restriction below the MVA. When leaving the confines of the DVA, ensure the aircraft reaches the MVA or has reported leaving the altitude of the obstacle(s) for which the MVA was created, climbing to an altitude at least 1,000 feet above the obstacle.

**e.** Headings must not be assigned beyond those authorized by the DVA prior to reaching the MVA.

**f.** Ensure all controllers are familiar with the provisions of the facility directive before vectoring aircraft in accordance with DVA procedures.



## Section 3. Letters of Agreement (LOA)

### 4-3-1. LETTERS OF AGREEMENT

**a.** Air traffic managers shall negotiate a LOA when operational/procedural needs require the cooperation and concurrence of other persons/facilities/organizations. A LOA shall be prepared when it is necessary to:

**b.** Supplement established operational/procedural instructions.

**c.** Define responsibilities and coordination requirements.

**d.** Establish or standardize operating methods.

**e.** Specify special operating conditions or specific air traffic control procedures.

**f.** Delegate responsibility for ATC service; e.g., approach control service, control boundary jurisdiction, and procedures for coordinating and controlling aircraft where two or more airports have conflicting traffic patterns or overlapping conflicting traffic patterns.

**g.** Establish responsibilities for:

**1.** Operating airport equipment.

**2.** Providing emergency services.

**3.** Exchange braking action reports with the airport management. As a minimum, procedures shall provide for the prompt exchange of reports which indicate runway braking conditions have deteriorated to “fair,” “poor,” or “nil” or have improved to “good.”

**4.** Reporting operating limitations and hazards.

**h.** Describe procedures that supplement those contained in FAAO JO 7110.65, Air Traffic Control, or FAAO JO 7110.10, Flight Services, to satisfy a requirement of a military service.

**REFERENCE-**  
FAAO JO 7110.65, Para 1-1-10, Constraints Governing Supplements and Procedural Deviations.

**i.** Define stereotyped flight plans used for special operations, such as training flights or flight test activities.

**j.** Describe airspace areas required to segregate special operations.

**k.** Establish aircraft radiotelephony call signs to be used by the tower and the local operators.

**l.** Define the responsibilities of the tower and the airport management or other authority for movement and nonmovement areas by precisely delineating the loading ramps and parking areas under the jurisdiction of the airport management or other appropriate authority. Facility air traffic managers may, at their discretion, exclude from the movement area those portions of the airport surface normally designated movement areas that are not visible from the tower. Consideration shall be given to the impact this may have on the movement of ground traffic. The agreement may include the following:

**1.** Airport management or other appropriate authority shall require, by agreement or regulation, all ground vehicles and equipment operators and personnel to obtain tower approval prior to entry onto the airport movement area and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas onto the movement area.

**2.** Airport management or other appropriate authority may also require those aircraft which will not infringe upon the movement area but will impede ingress and egress to the parking area to contact the tower for advisories prior to conducting pushback operations. State that information related to aircraft movement on the loading ramps or parking areas is advisory in nature and does not imply control responsibility.

**3.** At those airports where vehicles not equipped with two-way radio are permitted by the airport management or other appropriate authority to enter or cross the defined movement area at specific locations without approval from the tower, enter into an LOA with the airport management, or other appropriate authority, specifying the conditions for such operations and include the clause as follows: “The airport owner/operator covenants and expressly agrees that with regard to any liability which may arise from the operation within (area/areas), that party shall be solely and exclusively liable for the negligence of its own agents, servants, and/or employees, in accordance with applicable law, and

that neither party looks to the other to save or hold it harmless for the consequences of any negligence on the part of one of its own agents, servants, and/or employees.”

#### 4-3-2. APPROPRIATE SUBJECTS

Examples of subjects of LOAs are:

- a. Between ARTCCs:
  1. Radar handoff procedures.
  2. Interfacility coordination procedures.
  3. Delegation of responsibility for IFR control jurisdiction.
- b. Between ATCTs:
  1. Tower en route control service.
  2. Interfacility coordination procedures.
- c. Between Flight Service Stations: Procedures for maintaining master flight plan files.
- d. Between an ARTCC and an ATCT:
  1. Approach control service.
  2. Interfacility coordination procedures.
  3. Tower/center en route control service.
- e. Between an ARTCC and an FSS: Define areas of security responsibility. (See para 2-7-5, Facility Security.)
- f. Between an ATCT and an FSS: Operation of airport lighting.
- g. Between an ARTCC or an approach control facility and a nonapproach control tower, an FSS, an airport manager, or a local operator: Special VFR Operations. (See FIG 4-3-1.)
- h. Between an ARTCC or an approach control facility and a nonapproach control tower:
  1. Authorization for separation services.
  2. Interfacility coordination procedures.
- i. Between an ARTCC and another government agency:
  1. Interfacility coordination for control of ADC aircraft.
  2. Delegation of responsibility for approach control services.

#### 3. MTR procedures.

j. Between a tower and another government agency:

1. Simulated flameout procedures.
2. Control of helicopter SVFR flights.
3. Operation of aircraft-arresting barriers.
4. MTR procedures.

k. Between a tower and/or FSS and an airport manager/aircraft operator at airports upon which the tower and/or FSS is located:

1. Airport emergency service.
2. Operation of airport lighting.

3. Reporting airport conditions, to include how all PIREP braking action reports of “nil” and “poor” are to be immediately transmitted to the airport operator, and an agreement on actions by air traffic personnel for the immediate cessation of operations on runways subject to “nil” braking action reports.

#### REFERENCE-

*Advisory Circular AC 150/5200-30C, Airport Winter Safety and Operations.*

4. Control of vehicular traffic on airport movement areas.

#### NOTE-

*The intent of these LOAs is to use them where airports have standard routes that traverse movement areas on a long term basis. These LOAs are not intended to allow short term operations, single situations, or “open- field” clearances.*

5. Operations under an exemption from Part 91, Appendix D, Section 3, the surface area of Class B, Class C, Class D, or Class E airspace within which Special VFR weather minimums are not authorized.

#### REFERENCE-

*Advisory Circular AC 150/5210-7C, Airport Rescue and Fire Fighting Communications.*

l. Between a tower and/or FSS and an airport manager/aircraft operator at airports upon which the tower is located but the FSS is not: Reporting airport runway conditions.

#### 4-3-3. DEVELOPING LOA

Air traffic managers shall take the following action when developing a LOA: (See FIG 4-3-1 and FIG 4-3-2.)

a. Determine, through coordination, which FAA facility is principally responsible for processing the LOA.

**b.** Confine the material in each agreement to a single subject or purpose.

**c.** Describe the responsibilities and procedures applicable to each facility and organization involved.

**d.** Delegate responsibility for control of IFR aircraft, where necessary, by taking the following action:

**1.** Describe the area within which responsibility is delegated. The area may be depicted in chart form.

**2.** Define the conditions governing use of the area. These include altitudes, routing configuration, and limitations or exceptions to the use of the applicable airspace.

**3.** Specify the details of control procedures to be used. These include clearance limits, reporting points, handoff points, and release points.

**4.** Identify clearance limits designated as Instrument Approach Fixes when they are to be used for holding aircraft.

**5.** Specify communications and coordination procedures.

**e.** Coordinate with other FAA facilities and military or civil organizations as appropriate.

**f.** Attach charts or other visual presentations, when appropriate, to depict the conditions of the LOA.

**g.** Coordinate with the Regional Flight Standards Division, All Weather Operations Program Manager if aircraft operations or pilot procedures will be affected.

**h.** Prepare a single supplement, if necessary, to augment the letter at a facility and attach it to the basic LOA. Do not repeat material from the basic LOA.

**i.** After coordination, send two copies of the proposed LOA, including supplements, to the service area office for approval if required.

#### **4-3-4. REVIEW BY SERVICE AREA OFFICE**

**a.** The Service Area office shall review the proposed LOA, ensure coordination with other interested offices and affected user groups, as necessary, and approve the LOA if satisfactory.

**b.** The Service Area office may, in writing, delegate to air traffic managers, air traffic managers designees, ATREPs, or Region Air Defense Liaison Officer (RADLOs) the authority to develop, coordinate, approve, and implement LOAs except for:

**1.** Those which prescribe procedures or minima contrary to those contained in FAAO JO 7110.65, Air Traffic Control, unless appropriate military authority has authorized application of reduced separation between military aircraft; or

#### **REFERENCE-**

*FAAO JO 7110.65, Para 1-1-9, Procedural Letters of Agreement.*

**2.** Those between an IFR facility and a tower to authorize the separation services prescribed in para 2-1-15, Authorization for Separation Services by Towers, and para 10-5-3, Functional Use of Certified Tower Radar Displays.

#### **4-3-5. APPROVAL**

Upon receipt of Service Area office approval, the air traffic manager shall:

**a.** Prepare the LOA in final form incorporating the Service Area office guidance.

**b.** Establish an effective date, acceptable to all parties involved, that permits sufficient time for distribution and for participating facilities and user groups to familiarize personnel, revise directives, flight charts, etc., and complete other actions.

**c.** Sign the LOA and obtain signatures of other authorities as required.

**d.** Distribute copies of the signed LOA to each participating facility or organization, the Service Area office, and other interested offices. Distribution of supplements outside the facility is not required.

**e.** Ensure that current, new, or revised LOA, Standard Operating Procedures (SOP), and FAA Facility Orders (FO) are posted in the Facility Directives Repository (FDR) before the effective date of the document.

#### **REFERENCE-**

*FAAO JO 7210.3, Para 2-2-14, Facility Directives Repository (FDR).*

#### **4-3-6. REVISIONS**

**a.** Process revisions to LOAs and attachments or supplements thereto as page replacements. Mark the revisions as follows:

**1.** Place an asterisk or vertical line to the left of each new or revised paragraph or section to signify new material.

**2.** Identify page revisions by the “REV” number, e.g., “REV 1,” and the effective date in the lower right hand corner of each revised page.

**b.** Coordinate revisions to a LOA in the same manner and degree as for the original LOA.

#### **4-3-7. CANCELLATION**

Review letters of agreement frequently to ensure timeliness and conformance with current policy. Cancel any agreement which is no longer applicable, and notify the affected groups. Coordinate with the signatories and the Service Area office if cancellation is necessary. Ensure that the FDR is updated.

## FIG 4-3-1

**Format for a Control Facility/AFSS/FSS Letter of Agreement**

(Name) Center/Approach Control and (Name) AFSS/FSS

**LETTER OF AGREEMENT**

EFFECTIVE: \_\_\_\_\_

SUBJECT: Special VFR Operations within (Name) Airport Surface Area

- 1. PURPOSE:** To provide operating procedures for Special VFR flight handling in the (name) surface area without individual coordination.
- 2. SCOPE:** The procedures outlined herein are for use in the conduct of Special VFR operations within the (name) Airport surface area at or below \_\_\_\_\_ feet. These procedures are applicable only to aircraft equipped with functioning 2-way radio in order to effect a recall when required by traffic or weather conditions.
- 3. RESPONSIBILITIES:** Upon request by the (name) AFSS/FSS, the Center/Approach Control Facility may authorize Special VFR operations in the (name) Airport surface area for specific periods of time. The Center/Approach Control Facility shall retain the authority to withdraw the provisions of this agreement at any time.
- 4. PROCEDURES:**
- a. Local Special VFR operations. The (name) AFSS/FSS shall not authorize more than one aircraft to operate simultaneously in the surface area unless pilots agree that they will maintain visual separation with other aircraft operating in the surface area.
- b. IFR Arrivals and Departures. Special VFR operations shall be controlled by the (name) Center/Approach Control during the following periods:
- (1) From 10 minutes prior to the estimated time of arrival of an IFR aircraft over the approach fix until it is on the ground (IFR arrivals shall not be cleared for an approach until the AFSS/FSS confirms that there are no Special VFR operations in progress.)
  - (2) From 10 minutes prior to the estimated time of departure of an IFR aircraft until it departs the surface area.
- c. Special VFR Arrivals and Departures:
- (1) The (name) AFSS/FSS may authorize aircraft to enter, depart, or fly through the surface area when no Special VFR operations are in progress. Authorization shall be granted as outlined in 4a.
  - (2) Aircraft desiring to enter the surface area during times Special VFR operations are in progress shall be instructed to maintain VFR conditions outside the surface area pending recall and landing of aircraft operating in the surface area.
- d. Predesigned clearance phraseologies. To authorize Special VFR operations or to issue instructions or other messages pertinent thereto, the (name) AFSS/FSS shall use the following phraseology:
- (1) To authorize operations:  
A-T-C CLEARS (identification) TO ENTER/OUT OF/THROUGH (name) SURFACE AREA. MAINTAIN SPECIAL VFR CONDITIONS AT OR BELOW (altitude). REPORT LANDING COMPLETED/LEAVING SURFACE AREA,  
or  
A-T-C CLEARS (identification) TO OPERATE WITHIN (name) SURFACE AREA. MAINTAIN SPECIAL VFR CONDITIONS AT OR BELOW (altitude).
  - (2) To deny operations when visibility is less than one mile:  
VISIBILITY (value). A-T-C UNABLE TO ISSUE DEPARTURE/ENTRY CLEARANCE.
  - (3) To suspend operations:  
SPECIAL VFR AUTHORIZATION DISCONTINUED. RETURN TO AIRPORT OR DEPART SURFACE AREA. ADVISE INTENTIONS ..... (after response), REPORT LANDING COMPLETED/LEAVING SURFACE AREA.
  - (4) To advise an aircraft to remain outside the surface area:  
A-T-C ADVISES (identification) TO MAINTAIN VFR OUTSIDE THE (name) SURFACE AREA PENDING ARRIVAL/RECALL/DEPARTURE OF SPECIAL VFR AIRCRAFT.

\_\_\_\_\_  
Air Traffic Manager, (Name) AFSS/FSS\_\_\_\_\_  
Air Traffic Manager, (Name) ARTCC/Approach  
Control

*FIG 4-3-2*  
**Format for an ARTCC/Air Division Letter of Agreement**

|   |
|---|
| <p>(Name) Air Route Traffic Control Center and (Name) Air Division</p> <p style="text-align: center;"><b>LETTER OF AGREEMENT</b></p> <p style="text-align: right;">EFFECTIVE: _____</p> <p>SUBJECT: Inter-Facility Coordination for the Control of Aerospace Defense Command Interceptor Aircraft</p> <p><b>1. PURPOSE:</b> (List responsibility and describe necessary coordination.)</p> <p><b>2. CANCELLATION:</b> (As required.)</p> <p><b>3. SCOPE:</b> (Specify area, names, and types of facilities involved.)</p> <p><b>4. RESPONSIBILITIES:</b> (Specify.)</p> <p><b>5. PROCEDURES:</b></p> <ul style="list-style-type: none"> <li>a. ATC Assigned Airspace. (List procedures to be followed for requesting and authorizing airspace, handling aircraft to and from the airspace, and notifying when no longer required.)</li> <li>b. Transfer of Control. (Specify transfer procedures.)</li> <li>c. Departure. (Specify required advanced time for filing flight plans. Outline additional items required in the flight plan; e.g., type of departure, CONAD control facility, and IND position number.)</li> <li>d. En Route. (including information that ATC is responsible for effecting separation in assigned airspace whenever nonparticipating aircraft are cleared to operate within such airspace.)</li> <li>e. Arrivals. (Outline handoff procedures and special instructions.)</li> <li>f. General. (Self-explanatory.)</li> </ul> <p><b>6. ATTACHMENTS</b> (List, as required, items such as chart of ATC-assigned airspace areas, common reference/handoff points, etc.)</p> <hr/> <p>Air Traffic Manager, (Name) ARTCC</p> <hr/> <p>Commander, (Name) Air Division</p> <hr/> <p>(Title of other appropriate authority)</p> |
|---|

**4-3-8. AUTOMATED INFORMATION TRANSFER (AIT)**

a. Radar identification, altitude, and en route fourth line control information approval may be transferred via full data blocks without using point-out procedures or verbal coordination. Air traffic managers wishing to authorize the use of the AIT process shall establish AIT procedures adapted to local traffic situations and use the process only within the context of those specific procedures. These precoordinated procedures and the controller responsibilities shall be specifically defined in facility directives.

**REFERENCE-**  
FAAO JO 7110.65, Para 5-4-11, En Route Fourth Line Data Block Usage.

b. The controller who first transfers radar identification will also transfer aircraft communications. Either the transferring or the receiving controller, whoever is specified in a facility AIT

directive, may issue the altitude change, if any. Additionally, facility AIT directives shall require that any deviation from the specified procedure invalidates the procedure for that situation and requires that verbal coordination be completed as per FAAO JO 7110.65, Air Traffic Control, para 2-1-14, Coordinate Use of Airspace, para 2-1-15, Control Transfer, para 5-4-5, Transferring Controller Handoff, para 5-4-6, Receiving Controller Handoff, or para 5-4-7, Point Out. The following are general examples of the AIT process.

1. Transfer of radar identification only:

**EXAMPLE-**

*Controller A initiates a transfer of radar identification to controller B before the aircraft enters controller B's airspace. Controller B accepts the transfer of radar identification before the aircraft enters his/her airspace. Controller B, traffic permitting, then initiates a transfer of radar identification to controller C before the aircraft enters controller C's airspace. Controller A transfers aircraft communications to controller C before the*

aircraft enters controller C's airspace and after observing that controller C has accepted the transfer of radar identification.

**2.** Transfer of radar identification and altitude control:

**EXAMPLE-**

**1.** Controller A initiates a transfer of radar identification to controller B; controller B accepts the transfer. Controller B amends either the interim or assigned altitude in the data block to an altitude within his/her altitude stratum as prescribed in a facility directive. Controller B initiates a transfer of radar identification to controller C before the aircraft enters controller C's airspace. Controller A, after observing controller B initiate a transfer of radar identification to controller C, clears the aircraft to the altitude displayed in the data block by controller B. Controller A, after observing that controller C has accepted the transfer of radar identification, transfers aircraft communication to controller C before the aircraft enters controller C's airspace.

**2.** Controller C may clear the aircraft to the altitude displayed by controller B if so established in a facility AIT directive.

**3.** The following is an example of a pre-coordinated AIT procedure which might be written in a facility directive:

**EXAMPLE-**

The following procedure is established for implementation under the (AIT) process and is agreed to by the South and East areas. Aircraft departing ELP via J26 to ROW requesting FL 280 or above shall be handled as follows:

(a) Sector 20 shall clear the aircraft to FL 270 within its airspace and then initiate a transfer of radar identification to sector 63.

(b) Sector 63 shall accept the transfer of radar identification then display either an assigned or interim altitude in the data block.

(c) Sector 63 shall then initiate a transfer of radar identification to sector 23 before the aircraft enters sector 23's airspace.

(d) Sector 20, after observing the assigned/interim altitude displayed in the data block and that a transfer of radar identification has been initiated to sector 23, shall then clear the aircraft to the appropriate altitude.

(e) Sector 20 shall transfer communications of the aircraft to sector 23 before the aircraft enters sector 23's airspace and after observing sector 23's acceptance of the transfer or radar identification.

c. Due to system design, the transfer of data stored in the fourth line of the DSR FDB will not be displayed to the controller when operating on the backup system in either DARC/Host or DARC only modes.

**1.** When switching from the primary system to either mode of the backup system, ensure that the interfacility DSR fourth line data transfer is disabled.

**2.** When notified that an adjacent facility has transitioned from their primary system to either mode of the backup system, ensure that the interfacility DSR fourth line data transfer to that facility is disabled.

**3.** After successfully completing the transition back to the primary system, coordinate a time to enable interfacility DSR fourth line data transfer.

**4.** The air traffic manager shall ensure that these procedures are incorporated into a Standard Operating Procedure.





## Section 6. Records

### 4-6-1. FACILITY RECORDS MANAGEMENT

Manage facility records in accordance with FAAO 1350.15, Records Organization, Transfer, and Destruction Standards.

### 4-6-2. COLLECTION OF OPERATIONAL DATA

a. Air traffic managers are responsible only for the routine collection and reporting of basic operational information as authorized in this order or by the appropriate service unit. Collection of any data shall be considered a secondary function and shall not interfere with the accomplishment of operational duties.

b. Air traffic managers shall not permit their facilities to participate in special studies and surveys nor agree to the use of facility personnel to tabulate, prepare, or forward to outside organizations or parties any special summaries, abstracts, reports, or aeronautical data unless approved in advance by the Service Area office.

### 4-6-3. FORMS PREPARATION

a. Exercise care when preparing forms to ensure neatness and accuracy. The forms are a part of the facility's permanent records and subject to review by authorized personnel or agencies.

b. Except as in subpara c, do not erase, strikeover, or make superfluous marks or notations. When it is necessary to correct an entry, type or draw a single horizontal line through the incorrect data, initial that part of the entry, and then enter the correct data.

c. When using an automated Form 7230-4, grammatical and spelling errors may be corrected by use of delete or type-over functions. Substantive changes in contents of remarks should be accomplished by a subsequent or delayed entry. If the computer software used contains a strikeout feature, this feature may be used.

d. Authorized FAA abbreviations and phrase contractions should be used.

e. New daily forms shall be put into use at the start of each day's business.

### 4-6-4. FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION

a. Completion of FAA Form 7230-4, Daily Record of Operation. Using agency-approved automation methods to complete FAA Form 7230-4 is preferred to using manual methods.

1. Each air traffic facility must use the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230-4.

2. Where currently in use, facilities and/or TMUs may continue to use the NTML to complete an automated version of the FAA Form 7230-4.

#### **NOTE-**

*A National Workgroup has been established to develop methods to exchange pertinent data between CEDAR and NTML that is needed to complete FAA Form 7230-4. This method will enable a single method of completing an automated version of the FAA Form 7230-4 while maintaining the unique program functionality capability of both CEDAR/NTML programs.*

3. If an automated method is not available to complete FAA form 7230-4, the facility and or traffic management unit must manually complete the form. An example of the Daily Record of Facility Operation follows this section. (See FIG 4-6-1.)

b. The use of FAA Form 7230-4 for individual position assignments is authorized only for the STMCIC, FLMIC, OMIC, TMC, TMCIC, and CIC positions, and positions at the ATCSCC.

### 4-6-5. PREPARATION OF FAA FORM 7230-4

Personnel responsible for preparation of the Daily Record of Facility Operation, FAA Form 7230-4, shall ensure that entries are concise, yet adequately describe the operation of the facility, including any abnormal occurrences. Prepare FAA Form 7230-4 as follows:

a. Use of a typewriter, computer printout, or ink is mandatory. Signatures or handwritten initials shall be in either blue or black ink. Handwritten entries shall

be printed, rather than in script. REMARKS section entries shall be single-spaced.

**b.** Make all time entries in UTC, except that in the section titled "Personnel Log," local time shall be used for time and attendance purposes.

**c.** Complete the information required at the top of each form.

**d.** Make an appropriate notation under "Operating Position" to indicate the extent of the operation described on each form; e.g., "AM," "All," "Sector D3," etc.

**e.** The first entry in the REMARKS section of each day's form shall indicate the employee responsible for the watch and shall be used to show carry-over items. Items to be carried over from the preceding "Daily Record of Facility Operation" are those which will affect the current day's Daily Record (e.g., equipment outages, runway or airspace status, or coordinated routes/procedures). The last entry on each day's form shall indicate the close of business (COB), consider midnight local time or facility closing time, if earlier, as the close of the day's business.

**f.** Employees shall sign on/off as follows:

**1.** When a typed or handwritten FAA Form 7230-4 is used, the employee assuming responsibility for the watch shall sign on using their operating initials and shall sign the certification statement at the bottom of the form.

**2.** When an automated FAA Form 7230-4 is used, in lieu of actually signing the form, the employee assuming responsibility for the watch shall sign on using their name, e.g., "1430 J. SMITH ON." Entering the name of the employee assuming responsibility for the watch, in lieu of entering operating initials, serves the same purpose as signing the certification statement at the bottom of the actual form. Additionally, the employee responsible for the watch at the time that the form is printed out shall sign the certification statement at the bottom of the form, as when the actual FAA Form 7230-4 is used.

**3.** When FAA Form 7230-4 is used to indicate position responsibility, record employees initials and exact minute on/off the position.

**g.** Establish and post a list of equipment checks required during each watch; e.g., recorder checks, siren check, DF net check, etc. Make an entry

("WCLC") on FAA Form 7230-4 when the watch checklist has been completed. Notify the organization responsible for corrective action on equipment malfunctions. Record equipment malfunctions, equipment released for service, notification information and/or course of action taken to correct problem, and return of equipment to service. Facilities may establish local forms and procedures for recording and disseminating equipment malfunction and restoration information. Local forms used for recording this information are considered to be supplements to FAA Form 7230-4 and shall be filed with it.

**NOTE-**

*At facilities which are closed prior to the beginning of the new business day, changes in status can occur during nonoperational hours. If the status of equipment or other facility operations has changed from status reported on previous days' FAA Form 7230-4, changes shall be noted in Watch Checklist entry, as well as time of status change, if known (e.g., WCLC - ABC VOR RTS 0700). If necessary, place an "E" in the left margin as prescribed in para 4-6-5, Preparation of FAA Form 7230-4.*

**h.** FAA Order 7210.56, Air Traffic Quality Assurance, defines situations requiring a Quality Assurance Review (QAR) and the procedures to be followed to accomplish the review. Promptly notify personnel responsible for conducting the review upon identifying the need for a QAR. Record QARs with the minimum detail necessary in order to identify the initiating incident (for example, unusual go-around, 3-hour tarmac delay) and how it was identified (for example, in-flight evaluation).

**1.** En Route and Oceanic facilities must use the CEDAR tool to record and disseminate QARs. En Route and Oceanic facilities must also use CEDAR to document the resolutions of QARs.

**2.** Terminal facilities may establish local forms and procedures for recording, disseminating, and documenting the resolution of QARs. Local forms used for recording this information are considered supplements to FAA Form 7230-4 and must be filed with it.

**i.** Place a large letter "E" in the left hand margin beside entries on equipment malfunctions. The "E" shall also be used when equipment is restored to service. The "E" is not required for facilities using local forms if procedures are established in accordance with subpara g.

**NOTE-**

The "E" is to be used on entries related to equipment problems which require Technical Operations involvement. The "E" is not required for routine maintenance items or for carryover entries on previously entered equipment malfunctions.

**j.** Place a large letter "Q" in the left hand margin beside QAR entries. Resolution of QARs, made in accordance with FAAO 7210.56, Air Traffic Quality Assurance, shall be indicated by either the responsible person initialing and dating the original "Q" entry, or by a second "Q" entry identifying the incident and person responsible for accomplishing its review. It is not necessary to document the details of the review or corrective actions taken in these log entries provided the persons resolving the QAR maintain adequate notes and records so as to reasonably explain the QAR at a later date. The "Q" is not required for facilities using local forms if procedures are established in accordance with subpara h.

**k.** When this form is used to describe the operation of radioteletypewriter and radiotelegraph circuits, record the following information:

**1.** Frequencies being used and type of watch (continuous or scheduled) being maintained on each frequency.

**2.** A record of each communication, test transmission, or attempted communication except when such information is recorded elsewhere in the facility, the time the communication is completed, the station communicated with, and the frequency used.

**l.** Employees other than the person responsible for the watch who make an entry shall initial or enter initials for each of their own entries.

**m.** Use additional forms as necessary to complete the reporting of the day's activity.

**n.** Make an entry closing out FAA Form 7230-4 at the close of business.

**o.** The air traffic manager, or his/her designee, shall initial the form after reviewing the entries to ensure that the facility operation is adequately and accurately described.

**4-6-6. FAA FORM 7230-10, POSITION LOG**

**a.** Air traffic managers shall ensure that FAA Form 7230-10, Position Log, or an automated sign on/off procedure is used for position sign on/off. FAA Form 7230-10 shall be prepared daily. All logs, including automated ones, shall reflect 24 hours or the facility's official operating hours, if less than 24 hours daily.

**b.** Position logs shall be used as the sole-source record for on the job training instructor (OJTI) and evaluator time and premium pay. As a supporting document for time and attendance (T&A) purposes, position logs which document on the job training (OJT) time shall be retained for one year prior to destruction.

**c.** Prepare FAA Form 7230-10 as follows:

**1.** Field 1 shall contain the facility three-letter identification code.

**2.** Field 2 shall contain a position identifier that is a maximum of five letters and/or numbers, starting in the first space on the left side of the field. Unused spaces shall be left blank.

**(a) ARTCCs:** ARTCCs shall use sector identifiers which have been approved by the En Route and Oceanic Area Office.

**(b) TERMINALS and FSSs/AFSSs:** When there is more than one position of a particular type, establish and use individual identifiers for each position. When only one position of a particular type exists, this field may be left blank.

**3.** Field 3 shall contain a maximum of two letters to show the position type, as follows:

**(a) ARTCCs:** Starting on the left side of the field, use position codes as follows:

*TBL 4-6-1*  
**Field 3 - ARTCC**

| <i>Designator</i> | <i>Position</i>                     |
|-------------------|-------------------------------------|
| A                 | Assistant Controller                |
| D                 | Non-Radar Control                   |
| F                 | Flight Data                         |
| H or RA           | Handoff, Tracker or Radar Associate |
| R                 | Radar Control                       |
| TM                | Traffic Management                  |
| O                 | Other Positions                     |

**(b) Terminals:** Use two-letter position codes as follows:

*TBL 4-6-2*  
**Field 3 - Terminal**

| <i>Designator</i>   | <i>Position</i>            |
|---------------------|----------------------------|
| <b>Tower</b>        |                            |
| AC                  | Approach Control Cab       |
| CC                  | Coordinator Cab            |
| CD                  | Clearance Delivery         |
| FD                  | Flight Data                |
| GA                  | Ground Control Assistant   |
| GC                  | Ground Control             |
| GH                  | Gate Hold                  |
| LA                  | Local Control Assistant    |
| LC                  | Local Control              |
| SC                  | Supervision Cab            |
| <b>TRACON</b>       |                            |
| AP                  | Approach Control TRACON    |
| AR                  | Arrival Radar              |
| CI                  | Coordinator TRACON         |
| DI                  | Data TRACON                |
| DR                  | Departure Radar            |
| FM                  | Final Monitor Radar        |
| FR                  | Final Radar                |
| HO                  | Handoff TRACON             |
| NR                  | Non-Radar Approach Control |
| PR                  | Precision Approach Radar   |
| SI                  | Supervision TRACON         |
| SR                  | Satellite Radar            |
| <b>Tower/TRACON</b> |                            |
| TM                  | Traffic Management         |

(c) *FSSs/AFSSs*: Use two-letter codes, as follows:

*TBL 4-6-3*  
**Field 3 - FSS/AFSS**

| <i>Designator</i> | <i>Position</i>     |
|-------------------|---------------------|
| AA                | Airport Advisory    |
| AE                | Service A Edit      |
| BC                | Broadcast           |
| BE                | Service B Edit      |
| CO                | Coordinator         |
| FD                | Flight Data         |
| FW                | Flight Watch        |
| IF                | Inflight            |
| NO                | NOTAM               |
| OT                | Other               |
| PF                | Preflight           |
| TT                | Teletype            |
| WC                | Weather Coordinator |
| WO                | Weather Observer    |

4. Field 4 shall contain the date in digit format. All spaces must be used.

5. Field 5 shall contain the UTC time that the employee assumes responsibility for the position or the UTC time that the position is combined with another. For employees receiving OJT instruction or evaluation, field 5 shall contain the UTC time that the OJT instruction or evaluation begins.

6. Field 6 shall contain the operating initials of the employee working the position.

7. Field 7 shall contain the UTC time that the employee is relieved of responsibility for the position or the UTC time that the position is decombined. For employees receiving OJT instruction or evaluation, field 7 shall contain the UTC time that the OJT instruction or evaluation ends.

8. Field 8 shall contain the appropriate code identified at the bottom of page 1 of the form.

9. Field 9 shall contain the identifier of the position being combined with (per field 2). Field 9 may be left blank if the same entry is appropriate and entered in field 10.

10. Field 10 shall contain the type of position being combined with (per field 3).

11. If the second page (back-side) of FAA Form 7230-10 is used, then fields 1, 2, 3 and 4 on that page shall also be completed.

12. When a mistake is made in filling out fields 5, 6, 7, 8, 9, or 10 - if the portion of the line that is incorrect can be legibly corrected, then line out that portion only and write the correct information. If the incorrect portion cannot be legibly corrected, then line out the entire line and write the correct information on the next line.

**4-6-7. AUTOMATED POSITION SIGN ON/OFF**

**a. FLIGHT SERVICE STATION.**

Use of automated position sign on/off procedures is approved for FSS facilities. Facility managers are responsible for ensuring the accuracy of sign on/off data. Facilities must ensure sign on/off data is forwarded to concerned facilities along with other data required for accident packages. Sign on/off data must be retained for six months, in accordance with FAA Order 1350.15, Records Organization, Transfer, and Destruction Standards. Data can be retained either electronically or on paper. FAA Form 7230-10, Position Log, is only required to be used during those times that the automated procedure is not available.

**b. TERMINAL/EN ROUTE.**

Use of automated position sign on/off procedures is approved for terminal and en route facilities. The information requirements described in para 4-6-6, FAA Form 7230-10, Position Log, for FAA Form 7230-10 also apply to the automated procedure, except that times on/off the position may be displayed to the second rather than to the minute. Before implementation, facilities must receive En Route and Oceanic Operations Area or Terminal Operations Area office approval and must verify the accuracy of the automated sign on/off procedure by conducting a 30-day trial period. After successfully verifying the automated procedure's accuracy, an actual FAA Form 7230-10 is only required to be used during those times that the automated procedure is not available.

#### **4-6-8. TIME AND ATTENDANCE (T&A) RECORDING**

Record the actual times an employee works and is absent on a daily basis. Facilities may use any of the following methods for documenting time and attendance reported to the servicing payroll office.

**a.** The supervisor's or timekeeper's observation and subsequent recording of employees' hours worked. When this method is used, leave usage shall be documented via OPM (Formerly Standard Form 71), Request for Leave or Approved Absence, or a locally produced form/electronic format documented by facility directive.

**b.** Personnel log. A locally produced sign in/out form documented by facility directive, or FAA Form 7230-4.

**1.** When employees arrive, they shall sign their name and record their time of arrival. When employees leave, they shall record their time of departure and initial the form.

**2.** The personnel log shall contain a statement or certification signed by each shift supervisor affirming the form's accuracy and approving the entries made by personnel while under their supervision. This statement shall include the specific period of time for which each supervisor is providing certification.

**3.** The personnel log may also be used to document leave usage provided:

**(a)** The employee records the amount and type of leave used on the day the leave is used.

**(b)** Since leave use is covered by the Privacy Act, local management shall inform all employees that they may use OPM (Formerly Standard Form 71), Request for Leave or Approved Absence instead of indicating their leave use on the log (or any other group format employed). This notification shall be in writing, signed by the employee and retained in facility files, or the notification may be included in a facility directive which authorizes the group form.

**c.** Facilities may develop forms other than the personnel log to facilitate the documentation of leave and absence, provided:

**1.** The form includes, as a minimum, the employee request for leave, and the supervisor's approval/disapproval.

**2.** Each form and its use shall be contained in a facility directive.

**3.** Group forms shall allow for the Privacy Act alternative addressed above.

**d.** Initialing time and attendance reports may be used to document leave usage where this capability still exists.

**e.** Time clocks or other automated timekeeping devices. These devices may be linked to a supporting computer system for purposes of recording.

- (e) Any special requests.

**NOTE-**

*The passing of this data does not pre-empt the mission commander's responsibility to file a flight plan, nor does it constitute an ATC clearance.*

**2. The ATCSCC must:**

(a) Upon receipt of hurricane reconnaissance mission data, conference the affected ARTCC TMUs and distribute the mission information.

(b) Assist field facilities with traffic flow priorities if the hurricane reconnaissance flight will impact terminal traffic.

**3. ARTCC TMUs must:**

(a) Upon receipt of hurricane reconnaissance mission data, ensure that they are distributed to appropriate facilities in their jurisdiction.

(b) Relay any operational concerns to the ATCSCC for further evaluation and coordination.

**4.** Should it become necessary to contact a TEAL or NOAA flight and all other methods of communication are not possible (e.g., direct radio, ARINC, aircraft relay), the Chief, Aerial Reconnaissance Coordinator, All Hurricanes (CARCAH) may be requested to relay messages to/from the aircraft. You may receive a phone call from CARCAH to authenticate the request.

**5.** Requests to change any portion of the NHOP shall be coordinated with System Operations and Safety.

**5-3-7. OPEN SKIES TREATY AIRCRAFT PRIORITY FLIGHTS (F and D)**

**a.** The David J. Hurley Air Traffic Control System Command Center (ATCSCC) shall be the FAA coordination unit between the Defense Threat Reduction Agency (DTRA) and field facilities for all OPEN SKIES operational information. This includes

initial notification and follow-up information on each mission.

**b.** ARTCCs shall designate and advise the ATCSCC of a focal point within that facility for OPEN SKIES information.

**c.** Advance scheduled movement information of OPEN SKIES aircraft received from the DTRA will be forwarded by the ATCSCC.

**d.** Upon notification of an OPEN SKIES flight, the affected ARTCCs shall inform all affected FAA facilities and any other facility/agency it deems necessary within their area of responsibility of the flight path and possible deviation path of the aircraft.

**NOTE-**

*The possible deviation path for an OPEN SKIES aircraft is defined by treaty as fifty (50) kilometers or twenty seven (27) nautical miles either side of the intended route of flight. OPEN SKIES flights will not deviate from approved route of flight without ATC clearance.*

**e.** The air traffic manager of each facility through which the OPEN SKIES aircraft transits shall ensure that a supervisory specialist(s)/CIC monitors the aircraft while in the facility's airspace. The supervisory specialist(s)/CIC shall monitor the movement of the OPEN SKIES aircraft from the flight's entry into the facility's airspace until the flight exits the facility's airspace, to ensure that priority handling, separation, control, and coordination are accomplished.

**REFERENCE-**

*FAAO JO 7110.65, Subpara 2-1-4n, Operational Priority.  
FAAO JO 7110.65, Para 9-2-22, Open Skies Treaty Aircraft.  
TREATY ON OPEN SKIES, TREATY DOC. 102-37.*

**f.** Air traffic facilities shall notify the ATCSCC immediately in the event of any incidents or problems generated by OPEN SKIES aircraft.

**g.** The ATCSCC shall immediately notify System Operations Security/Strategic Operations Security for resolution of problems or incidents, if necessary.





2. Prepare a facility directive using the information as specified in the current LAHSO directive prescribing procedures for conducting these operations. The directive must contain a diagram that depicts the airport runway configuration, identifies the configuration to be used, and specifies the Available Landing Distance (ALD) from the landing threshold to the Hold-Short Point.

**NOTE-**

Any aircraft that is not listed in the current LAHSO directive shall not be considered for LAHSO.

**REFERENCE-**

FAAO JO 7110.65, Para 3-10-4, Intersecting Runway Separations.

3. Ensure the directive identifies the eligible aircraft which may operate on each runway, based on the ALD, current LAHSO directive, and/or FAAO JO 7110.65, Appendix A, Aircraft Information.

4. Provide a list of runways authorized for LAHSO, along with the appropriate ALD to System Operations Airspace and Aeronautical Information Management, for publication in the Airport/Facility Directory and appropriate U.S. Terminal Procedures Publications.

5. Conduct user briefings at least 45 days before implementation.

c. Air traffic managers must obtain concurrence from the appropriate Flight Standards field offices and conduct a preliminary environmental review before conducting LAHSO.

**REFERENCE-**

FAAO 1050.1, Policies and Procedures for Considering Environmental Impacts.

**NOTE-**

This is only applicable to those facilities not currently conducting SOIR operations.

### 10-3-8. LINE UP AND WAIT (LUAW) OPERATIONS

a. The ATM must:

1. Determine an operational need exists before conducting LUAW operations.

2. Before authorizing LUAW operations, conduct a review of the impact that airport configuration and local conditions may have on the application of LUAW procedures.

3. Prepare a facility directive prescribing:

(a) Local procedures for conducting these operations.

(b) Methods to assist the local controller in maintaining awareness of aircraft positions on the airport, for example, annotating flight progress strips or marking the location of aircraft with color-coded chips on a magnetic diagram of the airport.

**REFERENCE-**

FAAO JO 7210.3, Para 10-1-7, Use of Active Runways.

(c) The consolidation and staffing of positions.

(d) The requirements necessary for issuing a landing clearance with an aircraft holding in position.

(1) The safety logic system must be operated in full core alert runway configuration.

(2) The reported weather must be ceiling of 800 feet or more.

(3) The reported visibility must be 2 miles or more.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-4, Line Up and Wait (LUAW), subpara c1  
FAAO JO 7110.65, Para 3-10-5, Landing Clearance, subpara b

(e) Runway geometry, for example, the physical configuration of runways and other airport movement areas.

(f) Weather conditions, time of day, for example, prevailing light conditions.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-4, Line Up and Wait (LUAW), subpara c1  
and g.

(g) Fleet mix.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-6, Same Runway Separation.  
FAAO JO 7110.65, Para 3-9-7, Wake Turbulence Separation for Intersection Departures.  
FAAO JO 7110.65, Para 3-9-8, Intersecting Runway Separation.

(h) Traffic volume; complexity restrictions.

(i) Obstructions or limitations to visibility from controller-to-aircraft and aircraft-to-aircraft perspectives.

4. Local control position must not be consolidated/combined with any other non-local control position. For example, local control must not be consolidated/combined with the front-line manager/controller-in-charge (CIC) position, clearance delivery, flight data, ground control, cab coordinator, etc. Local control can be combined with other local control positions to include tower associate (local

assist) or local monitor position. When a Class B/helicopter position with defined control tower airspace is established, this position can be combined with local control.

5. The tower associate (local assist) position or a local monitor position must be staffed to permit more than one aircraft at a time to LUAW on the same runway between sunrise and sunset.

6. The front-line manager/CIC position should not be combined with any other position.

7. Ensure front-line managers/CICs review para 2-6-1a, Watch Supervision, with an emphasis on maintaining situational awareness and management of the operational environment with a goal toward eliminating distractions.

8. Do not authorize LUAW operations at an intersection between sunset and sunrise unless the following is implemented:

(a) The runway is used as a departure-only runway.

(b) Only one aircraft at a time is permitted to LUAW on the same runway.

(c) Document on FAA Form 7230-4, Daily Record of Facility Operation, the following: "LUAW at INT of RWY (number) and TWY (name) IN EFFECT" when using runway as a departure-only runway. "LUAW at INT of RWY (number) and TWY (name) SUSPENDED" when the runway is not used as a departure-only runway.

(d) At least 90 days before planned implementation, ATMs must submit the local directive outlining this operation for Terminal Operations and Terminal Safety and Operations Support approval. Terminal Operations and Terminal Safety and Operations Support directors must be notified of any proposed operational changes (for example, a change to the runway or taxiway for conducting LUAW operations).

b. ATMs must submit operational need for LUAW and a facility directive to the appropriate Director, Terminal Operations (service area office) for approval. ATMs must maintain a copy of the approval correspondence from Terminal Operations.

c. The Director, Terminal Operations, must ensure an annual review of LUAW operations is conducted for those facilities employing LUAW. The results of

this review must be sent to the Terminal Safety and Operations Support office by September.

### 10-3-9. TAKEOFF CLEARANCE

At those airports where the airport configuration does not allow for an aircraft to completely cross one runway and hold short of the departure runway and/or where airports do not have runway hold markings between runways, the ATM must establish guidelines for how aircraft are cleared for takeoff based on the airport configurations. These guidelines must ensure aircraft are still precluded from mistakenly departing from other than the assigned runway while taking into account factors affecting aircraft being "clear of the runway," for example, minimum distance between runways, presence of hold position markings, signage, etc. A facility directive must include where these procedures are able to be applied.

#### REFERENCE-

FAAO JO 7110.65, Para 3-9-9, Takeoff Clearance.  
Pilot/Controller Glossary Term - Clear of the Runway.

### 10-3-10. MULTIPLE RUNWAY CROSSINGS

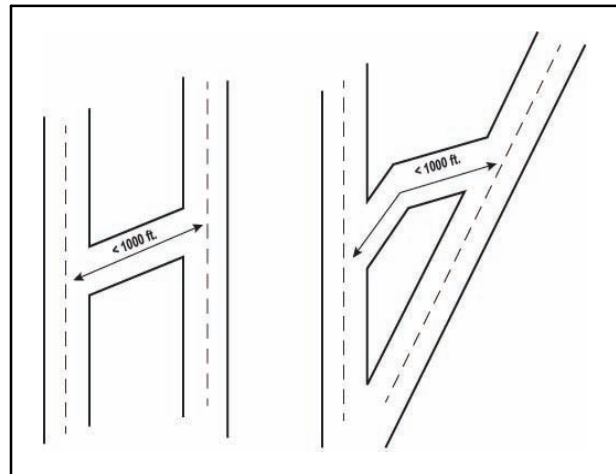
a. Air traffic managers at airports where the taxi route between runway centerlines is less than 1,000 feet must submit a request to the appropriate Terminal Services Director of Operations for approval before authorizing multiple runway crossings.

#### REFERENCE-

FAAO JO 7110.65, Para 3-7-2, Taxi and Ground Movement Operations

FIG 10-3-1

Multiple Runway Crossings



b. The request must address the specific locations where multiple runway crossings will be authorized. This must only include locations where the

intervening taxi route is less than 1,000 feet between runway centerlines.

**c.** Facilities must keep a copy of the approval correspondence issued by the Terminal Services Director of Operations.

**d.** Facility directives must include a diagram that

depicts the runway/taxiway intersections where multiple runway crossings are authorized.

**e.** The Terminal Services Director of Operations must ensure that an annual review of multiple runway crossing operations is conducted for those facilities employing this operation. The results of this review must be sent to the Terminal Safety and Operations Support Office by September of each year.



FSFO having jurisdiction over the area shall be notified of the operational status of the ALS.

(g) When required to meet local atmospheric, topographic, or twilight conditions, prepare a facility directive specifying the intensity settings for the ALS and forward a copy to the FSDO.

### **10-6-5. VISUAL APPROACH SLOPE INDICATOR (VASI) SYSTEMS**

a. There are three basic VASI configurations: VASI-2, VASI-4, and VASI-12. Two additional configurations were developed for use with long-bodied aircraft by adding a third bar to either the VASI-4 or the VASI-12. These configurations are referred to as VASI-6 and VASI-16.

b. The basic FAA standard for VASI systems permit independent operation by means of a photoelectric device. This system has no remote monitor and no on-off control feature. It is intended for continuous operation.

c. Other VASI systems in use include the following:

1. The basic VASI as described in subpara b, except at locations where the system was installed with an on-off remote switch in the control tower. If an on-off switch is provided, it is intended that the VASI be operated on a continuous basis when the runway it serves is in use. Airport operators at some locations may request the facility air traffic manager to operate this system only during certain hours and/or conditions. When this occurs, facility air traffic managers shall contact the Terminal Operations Service Area Office for guidance.

**NOTE-**

*When VASI systems are installed under the FAA's Airport Improvement Program, the sponsor may negotiate a letter of agreement with the regional Airports Division for a part-time VASI operation. Terminal Operations Service Area Offices should consult with the regional Airports Division on such matters.*

2. Systems that are operated remotely from the control tower may be either two-step or three-step. It is intended that these systems be operated on a continuous basis when the runway they serve is in use.

3. Systems with steep descent profiles intended for STOL operations may be operated on an

individual aircraft basis or as determined by the facility air traffic manager dependent upon the frequency of use.

d. The basic FAA standard VASI is not provided with a remote status indicator. At locations where a VASI remote status indicator is installed, specialists shall notify air traffic when a malfunction is indicated or reported. The VASI should not be turned off nor a NOTAM issued unless the Technical Operations technician advises it is inoperative or if it is obvious that it is inoperative. In the event the technician advises there is a one side operating condition at locations with a VASI on both sides of a runway, the system shall remain in operation and NOTAM indicating partial operations issued.

### **10-6-6. PRECISION APPROACH PATH INDICATOR (PAPI) SYSTEMS**

a. The basic FAA standard for PAPI systems permit independent operation by means of a photoelectric device. This system has no remote monitor and no on-off control feature. It is intended for continuous operation.

b. Other PAPI systems in use include the following:

1. The basic PAPI system as described in subpara a, except at locations where the system was installed with an on-off remote switch in the control tower. If an on-off switch is provided, it is intended that the PAPI be operated on a continuous basis when the runway it serves is in use. Airport operators at some locations may request the facility air traffic manager to operate this system only during certain hours and/or conditions. When this occurs, facility air traffic managers shall contact the Terminal Operations Service Area office for guidance.

2. Systems that are operated remotely from the control tower may be five-step. It is intended that these systems be operated on a continuous basis when the runway they serve is in use.

**NOTE-**

*When PAPI systems are installed under the FAA's Airport Improvement Program, the sponsor may negotiate a letter of agreement with the regional Airports Division for a part-time PAPI operation. Terminal Operations Service Area offices should consult with the regional Airports Division on such matters.*

**10-6-7. RUNWAY AND TAXIWAY LIGHTS**

When required, prepare a facility directive specifying local procedures for the operation of Runway End Identifier Lights (REIL), High Speed Turnoff Lights, or Runway Centerline and Touchdown Zone Light Systems (RCLS TDZL), and forward a copy to the FSDO.

**10-6-8. RUNWAY FLOODLIGHTS**

Where runway floodlights are installed, local procedures shall be established for their operation. These shall provide that they be turned off when an aircraft is required to taxi toward the lights and they may be blinding to the pilot. Also, that they shall be operated as requested by a pilot for his/her operation.

**10-6-9. RUNWAY EDGE LIGHTS ASSOCIATED WITH MEDIUM APPROACH LIGHT SYSTEM/RUNWAY ALIGNMENT INDICATOR LIGHTS**

Two MALS/RAIL installations associated with runway edge lights are available. One is a two step brightness MALS and a one step brightness RAIL. The other is a three step brightness MALS and a three step brightness RAIL. The associations with runway edge step settings are shown in the following table. Facility air traffic managers shall coordinate with the Technical Operations SMO sector to determine which of the two has been installed and issue a facility directive informing facility personnel. (For intensity settings see TBL 10-6-1.)

*TBL 10-6-1*  
**MALS/RAIL Step Intensity Settings**

| <i>Runway Edge Lights</i> |             | <i>Two Step MALS/One Step RAIL</i> |             | <i>Three Step MALS/Three Step RAIL</i> |                       |
|---------------------------|-------------|------------------------------------|-------------|--|-----------------------|
| <i>Intensity</i>          |             | <i>Intensity</i>                   |             | <i>Intensity</i>                       |                       |
| <i>HIRL</i>               | <i>MIRL</i> | <i>MALS</i>                        | <i>RAIL</i> | <i>MALS</i>                            | <i>RAIL</i>           |
| Step 5                    | Step 3      | 100%                               | 100%        | 100%                                   | 100%                  |
| Step 4                    |             |                                    | 100%        | 100%                                   | 100%                  |
| Step 3                    | Step 2      | 10%                                | OFF         | 20%                                    | 26% outer<br>8% inner |
| Step 2                    |             |                                    | OFF         | 4%                                     | 1%                    |
| Step 1                    | Step 1      | OFF                                | OFF         | 4%                                     | 1%                    |

## Section 3. Line of Authority

### 17-3-1. ATCSCC

a. Each national operations manager (NOM) is under the general supervision of the Manager of the ATCSCC. Each national traffic management officer (NTMO) is under the general supervision of the NOM. Each national traffic management specialist (NTMS) is under the general supervision of the NTMO.

b. In the absence of the NTMO, there will be designated a national traffic management specialist-in-charge (NTMSIC) that performs these duties in accordance with management direction.

### 17-3-2. ARTCC

The TM Coordinator at ARTCC facilities (TMC) is under the general supervision of the supervisory TM coordinator (STMC). The STMC is under the general supervision of the Traffic Management Officer

(TMO). In the absence of the STMC the STMCIC is under the general supervision of the TMO. In the absence of the TMO the STMC/STMCIC is under the general supervision of the air traffic manager.

### 17-3-3. TERMINAL

a. The TM coordinator (TMC) at terminal facilities works under the general supervision of the STMC or TMCIC. Each STMC is under the general supervision of the Traffic Management Officer (TMO). In the absence of a STMC, and when more than one TMC is assigned to a shift, there will be a designated TMCIC. The TMCIC will perform these duties in accordance with management direction.

b. In the TMCs absence or at those TRACONs and/or towers where TMCs are not authorized, the individual(s) designated to perform TM functions is the operations supervisor-in-charge (OSIC).





## Section 4. Supplemental Duties

### 17-4-1. TELEPHONE CONFERENCES

**a.** The ATCSCC is involved in several daily telephone conferences (TELCONs). TELCONs are initiated and hosted by the ATCSCC for field facilities, the appropriate Vice Presidents, and the Chief Operating Officer. Supplemental conference capability is available through the FAA's Remote Transmitter Site and the Washington Operations Center.

**b.** TMUs/TMCs utilize TELCONs when the need arises to discuss, evaluate, or problem solve any issues. These conference calls should include the appropriate ARTCC TMU, adjacent terminal facilities/towers, the ATCSCC, and the service area TM branch or Service Area office responsible for TM.

**c.** TMUs/TMCs should actively participate in facility briefings and user meetings in order to promote, educate, and inform all concerned about the function, role, and responsibilities of TM.

**d.** TELCONs are also used to maintain operational "Hotlines." The objective of Hotlines is to provide rapid communications between FAA facilities, customers and other aviation interests when complex air traffic and airspace issues are being managed. Hotlines allow many participants the capability to problem-solve complicated issues and reduces the amount of coordination needed to implement collaborated strategies. Hotlines may be initiated at the request of both the FAA and other aviation entities that substantiate its use. The operational Hotlines are authorized for customer attendance; however, they may be limited to listen-only capability.

**1.** The ATCSCC administers, facilitates, and manages operational Hotlines.

**2.** Hotlines are used to communicate:

- (a)** Airport and airspace capacity issues.
- (b)** Constraint/capacity mitigation strategies.
- (c)** Route availability information and route alternatives.
- (d)** Weather information.
- (e)** Equipment Outages.

**(f)** Customer preferences for initiatives and alternatives.

**(g)** Special circumstances, contingency requirements and emergency events.

**(h)** All required coordination and information sharing necessary in regard to the event.

**(i)** Coordination that can be accomplished quickly and precisely with all parties. If an item requires extensive coordination, other communication sources will be used.

**(j)** Items that are not considered sensitive or classified in nature.

#### **NOTE-**

*Examples of sensitive or classified items include VIP movement and military requirements or exercises.*

### 17-4-2. SPECIAL INTEREST FLIGHTS

ATCSCC, ARTCC, and CERAP: Follow procedures in FAAO JO 7610.4, Special Operations, Chapter 12, Special Military Flights and Operations, Section 13, Special Interest Flights, regarding special interest flights from State Department designated special interest countries. Forward all issues concerning special interest flights to the DEN ATSC for relay to the appropriate authorities.

### 17-4-3. ANALYSIS

**a.** The TMU analysis function or individuals assigned analysis functions shall be responsible for the collection and analysis of all available data as it pertains to traffic capacity, traffic flows, points of congestion, peak hours, etc. Specific areas of consideration include, but are not limited to:

- 1.** Sector demand (by hours).
- 2.** Sector flows (route/altitudes).
- 3.** Sector loading points.
- 4.** Sector traffic breakdown by category of user.
- 5.** Normal initiatives necessary to prevent sector saturation.
- 6.** Alternatives to prevent saturation and relieve congestion/conflicts.

#### **NOTE-**

*Alternatives must take into consideration other facility/sector capabilities.*

7. Total facility traffic count and potential user demand.

8. Sector staffing required to support potential user demand.

9. Location of delays (by sector and airport).

b. Coordination with user organizations shall be effected, when appropriate.

#### **17-4-4. OPERATIONS MANAGER (OM) SUPPORT**

Facility TMUs shall maintain a working knowledge of the major related fields of air traffic operations/responsibilities to effectively support the STMCIC in dealing with special situations that may arise on a daily basis. Reference sources that identify these related areas are listed below.

a. Emergency plan: Numerous interfacility letters of agreement are normally located at the STMCIC complex concerning plans which have been established to provide continuity in the event of a disaster or emergency conditions that would limit air traffic service. Additionally, in these binders are instructions concerning security control of air traffic and air navigation aids, defense readiness, and physical security plans.

b. Accident procedures/bomb threats/search and rescue procedures:

1. FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting.

2. Bomb threats.

3. National Search and Rescue Manual.

4. FAAO 1270.1, Freedom of Information Act Program.

c. EA activity: FAAO JO 7610.4, Special Operations.

d. Hijack situations:

1. FAAO JO 7610.4, Special Operations.

2. FAAO JO 7110.65, Air Traffic Control.

e. Suspect aircraft:

1. FAAO 1600.29, Law Enforcement Alert Message System.

2. FAAO JO 7110.67, Special Aircraft Operations by Law Enforcement/Military Organizations.

f. Special flight operations: FAAO JO 7110.65, Chapter 9, Special Flights.

g. FAAO 7210.38, Center Weather Service Unit (CWSU).

#### **NOTE-**

*In order to provide the maximum TM services, TM personnel should be utilized to perform non-TM functions only as a last resort.*

#### **17-4-5. DIVERSION RECOVERY**

a. A diversion is a flight that is required to land at other than its original destination for reasons beyond the control of the pilot/company, e.g., periods of significant weather. Diversion recovery is an initiative orchestrated by the ATCSCC and system users to minimize the impact of system disruption. Diversion recovery will be utilized during and after periods of significant weather or other phenomena that has adversely impacted the system resulting in flight diversions. The goal of the diversion recovery initiative is to ensure that flights which have already been penalized by having to divert to another airport, do not receive additional penalties or delays. Flights identified for diversion recovery shall receive priority handling over other flights from their point of departure.

b. Diversion flights are identified by having "DVRSN" in the Remarks section of the flight plan, or the user inputs the information into the Diversion Recovery Tool (DRT). The following protocols will be utilized in diversion recovery procedures:

1. A flight on the DRT, as listed in TBL 17-4-1, is requesting priority. FAA facilities shall ensure the auto-detect feature is not activated on their DRT. FAA facilities shall view the "general aviation" and "comments" columns when utilizing the DRT.

2. "High" priority indicates the user's preference within one company.

3. "Yes" priority indicates that special handling is requested for the flight.

4. The user submitted preferred priorities may be modified where necessary to maintain the efficiency of the system.

c. The ATCSCC shall:

1. Implement diversion recovery.

2. Transmit an advisory to inform both field facilities and users that a diversion recovery initiative

TBL 17-5-1

| AVIATION SYSTEM PERFORMANCE METRICS |     |     |     |     |
|-------------------------------------|-----|-----|-----|-----|
| AIRPORT TRAFFIC CONTROL TOWERS      |     |     |     |     |
| ABQ                                 | DCA | LAS | ONT | SEA |
| ANC                                 | DEN | LAX | ORD | SFO |
| ATL                                 | DFW | LGA | OXR | SJC |
| AUS                                 | DTW | LGB | PBI | SJU |
| BDL                                 | EWR | MCI | PDX | SLC |
| BHM                                 | FLL | MCO | PHL | SMF |
| BNA                                 | GYG | MDW | PHX | SNA |
| BOS                                 | HNL | MEM | PIT | STL |
| BUF                                 | HOU | MHT | PSP | SWF |
| BUR                                 | HPN | MIA | PVD | TEB |
| BWI                                 | IAD | MKE | RDU | TPA |
| CLE                                 | IAH | MSP | RFD | TUS |
| CLT                                 | IND | MSY | RSW | VNY |
| CVG                                 | ISP | OAK | SAN |     |
| DAL                                 | JAX | OGG | SAT |     |
| DAY                                 | JFK | OMA | SDF |     |

**17-5-5. STATIC COORDINATION**

a. The ATCSCC must collect and manage updates for ASPM facilities’ static data, currently depicted in the NTML and on the Operational Information System (OIS) under the associated ARTCC tabs in the East and West Directories.

**NOTE-**

Updates will be made to the NTML and the OIS for ASPM airports’ normal runway configurations and their associated AARs/ADRs twice yearly and effective on or about January 1 and July 1 of each year.

b. The TMO or overlying TMO, in conjunction with their ASPM facilities, must provide the following static data to their appropriate Manager of Tactical Operation (MTO) and ensure the accuracy of the information:

1. All normal runway configurations and their associated AARs/ADRs by May 1 and November 1 each year.

**NOTE-**

AARs are required for the following four categories: Visual meteorological conditions (VMC), low visual meteorological conditions (LVMC), instrument meteorological conditions (IMC), and low instrument meteorological conditions (LIMC).

2. Changes to additional supporting AAR data by the first of every month:

(a) Associated landing/departing runway configurations

(b) Suggested program rate

(c) Pertinent notes

(d) Holding capacities

(e) Arrival flows

(f) Category minimums

3. Changes to TM Tips by the first of every month:

(a) Configuration instructions/planning

(b) Airport operational challenges

(c) Seasonal traffic information

(d) Gate hold information

(e) Special arrival instructions

(f) Other pertinent information related to airspace, procedures, weather operations, local traffic management initiatives, taxiway information, and any other items that impact traffic flows or runway acceptance/configuration

c. The following ASPM facilities/TMOs must also provide wind parameters to their respective MTO:

1. Newark Liberty International Airport (EWR)

2. John F. Kennedy International Airport (JFK)

3. La Guardia Airport (LGA)

4. General Edward Lawrence Logan International Airport (BOS)

5. Theodore Francis Green State Airport (PVD)

d. The MTO must provide:

1. All normal runway configurations and the associated AARs/ADRs for their underlying ASPM facilities to the ATCSCC Facility Automation Office by May 15 and November 15 each year.

2. Changes to additional supporting AAR data and TM tips for their underlying ASPM facilities to the ATCSCC Facility Automation Office by the 10th of each month.

### 17-5-6. EN ROUTE INTRA-FACILITY COORDINATION

a. The STMC must ensure that an operational briefing is conducted at least once during the day and evening shifts. Participants must include, at a minimum, operational supervisors and other interested personnel designated by the facility management. Discussion at this meeting should include:

1. Planning TELCON checklist.
2. Operations Plan.
3. Topics pertinent to the facility.

b. Coordination between the TMU and Operations Supervisor (OS): In some facilities, the TM function may be performed by the OS or as designated by the air traffic manager. Timely coordination between the OS and TMU is paramount in not only implementing TM initiatives, but also in evaluating the effectiveness of any initiatives.

### 17-5-7. TERMINAL INTER-FACILITY COORDINATION

a. Coordination between tower and TRACON TMUs: Towers that are not collocated with a TRACON TMU must coordinate with the appropriate TMU where the TM function has been established. If the TM function has not been established, then the tower must coordinate with the appropriate en route TMU.

b. Coordination between the TMU and ATCSCC NTMSs: Unusual circumstances or significant issues do not preclude the terminal TMU from contacting the ATCSCC directly.

c. Coordination between the TMU and the local NWS or CWSU must be completed as soon as

practical at the beginning of each shift, and, as necessary, the TMU must obtain a weather briefing from the NWS.

d. Coordination between the TMU and the adjacent terminal: Timely coordination is imperative in order to manage the efficiency of the tower en route control (TEC) environment. Any TM initiatives imposed between two (2) or more adjacent terminals that could have an impact on the capacity of any airport, sector, or ARTCC must be coordinated with the appropriate ARTCC TMU.

### 17-5-8. NATIONAL TRAFFIC MANAGEMENT LOG (NTML)

a. Facility personnel must enter data in a timely manner on the appropriate template and verbally coordinated when required. Timely is construed to mean that it would be useful to someone looking at the data in current time. If workload conditions or the situation prohibits entering the data in a timely manner, the information should be recorded by a subsequent or delayed entry or on the appropriate form. Substantive changes in the contents or remarks or additional explanatory information should be accomplished by a subsequent or delayed entry.

b. The data in NTML will be subject to FAA security provisions for Internet technology. Facilities must use the NTML in preference to other methods. The NTML is an automated FAA Form 7230-4, Daily Record of Facility Operation, and will record the operating initials and facility for all log entries. Operating initials are removed at the end of six months in accordance with FAA Order 1350.15, Records Organization, Transfer, and Destruction Standards.

c. The NTML automatically closes and reopens a new log each day; it automatically records the operating initials of the person previously signed on. Carryover items may be entered by the specialist or automatically be entered by the software based on the end/date/time group. Closing and opening logs are concurrent with each local day; however, the entries are made utilizing Coordinated Universal Time.

d. When it is necessary to amend a previous entry, the original entry may be corrected through normal computer entries; however, the database will be automatically marked and the information must be retrievable by the system administrator.

## Section 20. National Playbook

### 17-20-1. PURPOSE

The National Playbook is a collection of Severe Weather Avoidance Plan (SWAP) routes that have been pre-validated and coordinated with impacted ARTCCs. The National Playbook is designed to mitigate the potential adverse impact to the FAA and customers during periods of severe weather or other events that affect coordination of routes. These events include, but are not limited to, convective weather, military operations, communications, and other situations.

### 17-20-2. POLICY

National Playbook routes must only be used after collaboration and coordination between the ATCSCC NSST, and the TMU(s) of affected air traffic facilities.

### 17-20-3. DEFINITION

The National Playbook is a traffic management tool developed to give the ATCSCC, other FAA facilities, and customers a common product for various route scenarios. The purpose of the National Playbook is to aid in expediting route coordination during those periods of constraint on the NAS. The National Playbook contains common scenarios that occur during each severe weather season, and each includes the resource or flow impacted, facilities included, and specific routes for each facility involved. These routes may include any combination of the following NAS elements: Navigation Reference System (NRS) waypoints, RNAV waypoints, RNAV fixes, NAVAIDS, DPs, and STARS. The playbooks are validated by the individual facilities involved in that scenario. The National Playbook is available on the ATCSCC Web site at <http://www.atcsc.faa.gov/Operations/operations.html>.

### 17-20-4. RESPONSIBILITIES

a. The ATCSCC must:

1. Manage the National Playbook program.
2. Operate as OPI at the national level.

3. As a minimum, conduct a yearly review of the National Playbook routes and procedures.

4. Facilitate the validation process for additions, modifications, updates, and corrections.

5. Coordinate the activation/deactivation of National Playbooks.

6. Maintain a listing of all National Playbook routes on the ATCSCC web page.

b. The NFDC must forward to the ATCSCC point of contact (POC) any changes to published navigational database, (i.e., SIDs/STARS, NAVAIDS, preferred routes, etc.) contained in the National Flight Data Digests (NFDD) that are effective for the subsequent chart date. This data must be provided at least 45 days before the chart date.

c. The En Route and Oceanic Operations Service Area and Terminal Operations Service Area offices must:

1. Ensure facilities submit data as required.
  2. Resolve discrepancies and issues identified.
  3. Submit suggestions for improving the process, when applicable.
- d. The ARTCCs must:
1. Identify, develop, and coordinate National Playbook routes as needed, in accordance with this section.

2. Supply a POC for the ATCSCC to contact regarding National Playbook routes.

3. Participate in the validation process of National Playbook routes impacting their facility. The validation of a National Playbook route is considered complete when all facilities affected by that route have confirmed the route as acceptable. Validation may also be accomplished by responding through the Route Management Tool (RMT), where it is available.

4. Report unusable, inaccurate, or unsatisfactory route data contained in the National Playbook to the ATCSCC Strategic Operations office. Reports must include the National Playbook designation and specific description of the data error and, if appropriate, suggestion for modification.

5. Recommend improvements in the process, if applicable.

e. Terminal Facilities must coordinate with their parent ARTCC for all matters pertaining to the National Playbook.

### **17-20-5. NATIONAL PLAYBOOK DATA FORMAT**

a. All ARTCCs must develop and update the National Playbook in accordance with the following:

1. All National Playbook routes that specify the use of an arrival and departure procedure must have that procedure number (SID/STAR) included as part of the route string.

**NOTE-**

*Examples of acceptable procedure numbers are: LGC8, OTT5, and SWEED5. Examples of unacceptable procedure numbers are: MINKS#, MINKS STAR, and MINKS %.*

2. Approved database format:

(a) Route string data must include only uppercase characters (A-Z) or numbers with spaces separating each element (i.e., J48 ODF MACEY2 ATL.)

(b) No dots, dashes, asterisks, plus signs, or placeholders are to be included.

(c) No leading zeroes are permitted in victor or jet airways (J12 is permitted, J012 is not).

b. National Playbook routes will be published on the ATCSCC Web site. Updates to the National Playbook will coincide with the normal 56-day chart updates.

c. Changes to the National Playbook must be processed in accordance with the following timelines:

1. All changes require validation with affected facilities and therefore must be submitted to the ATCSCC POC at least 35 days prior to each chart date.

2. All National Playbook additions, deletions, and significant route modifications require coordina-

tion with FAA facilities and customers, and must be coordinated with the ATCSCC and validated at least 35 days prior to each chart date to be eligible for inclusion in that update.

**NOTE-**

1. *The ATCSCC will conduct an annual meeting or telecon to coordinate the National Playbook additions, deletions, and significant route modifications. This coordination will include FAA facilities and customers.*

2. *Seven days prior to the chart date, a preview version of the National Playbook will be made available to FAA facilities via the ATCSCC Web site.*

### **17-20-6. PROCEDURES**

a. National Playbook routes are considered active when the ATCSCC Regional Airspace Manager (RAM) has completed coordination with all impacted facilities. An ATCSCC numbered advisory will be sent by the NSST describing the route being used.

b. National Playbook routes may be modified tactically to achieve an operational advantage. The ATCSCC RAM will coordinate these changes verbally with all impacted facilities and ensure that the published advisory contains the modifications.

c. Facilities must monitor and provide real-time reports of the impact and continued need for the use of the National Playbook routes through the ATCSCC RAM.

d. A National Playbook route is no longer active when the expiration time stated on the advisory has been reached without an extension coordinated or a decision to cancel the route has been reached. If the route is cancelled prior to the expiration time, the ATCSCC RAM will coordinate with all impacted facilities and publish an advisory stating that the route has been cancelled.

e. If there are circumstances that prevent the use of a National Playbook route, then the air traffic facility involved must inform the ATCSCC RAM. It is the responsibility of the impacted facility and the ATCSCC to ensure the route is not utilized until the circumstances preventing its use is corrected or the route is deleted.

## Section 3. Line of Authority

### 20-3-1. SYSTEM OPERATIONS SECURITY

Manager, Strategic Operations Security and Manager, Tactical Operations Security are under the general supervision of the Director, System Operations Security. And as such, have been delegated all the rights and responsibilities of the Director.

### 20-3-2. AIR TRAFFIC SECURITY COORDINATOR (ATSC)

a. Air Traffic Security Coordinators (ATSCs) are

air traffic control specialists that have been provided with additional training and responsibilities in the area of air security and air defense.

b. The ATSC works under the general supervision of the Tactical Manager. In the absence of the Tactical Manager, the ATSC responsible for the Domestic Events Network (DEN) assumes the operational responsibility of System Operations Security.

c. ATSCs assigned to liaison positions will normally be directly assigned at the Commanding General Officer staff level, such as Continental NORAD Region (CONR) or NORAD.





## Section 4. Supplemental Duties

### 20-4-1. DOMESTIC EVENTS NETWORK (DEN)

**a.** Domestic Event Network (DEN). A 24/7 FAA sponsored telephonic conference call network (recorded) that includes all of the air route traffic control centers (ARTCC) in the United States. It also includes various other Governmental agencies that monitor the DEN. The purpose of the DEN is to provide timely notification to the appropriate authority that there is an emerging air-related problem or incident.

**b.** Required ATC facility DEN participation.

**1.** All ARTCCs.

**2.** All facilities in the National Capital Region (NCR).

**3.** Approach control facilities must participate on the DEN during President of the United States (POTUS) TFRs, National Special Security Events (NSSE) affecting their area, or when directed by System Operations Security or the DEN Air Traffic Security Coordinator (ATSC).

**4.** ATCT must participate on the DEN during arrival and departure phase of POTUS, Vice President of the United States (VPOTUS), First Lady of the United States (FLOTUS) movements, or when directed by System Operations Security or the DEN ATSC.

**5.** If the ATC facility is not actively monitoring the DEN or have a dedicated line to the DEN, they should call into the DEN directly via (202) 493-4170.

**6.** All communication regarding real-time security concerns and operational impacts should be initiated and coordinated on the DEN. The premise of the DEN is a need to share versus a need to know.

**7.** The DEN is an open mode of communication and is not intended for classified information.

### 20-4-2. PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED VIP MOVEMENT

**a.** Tactical Operations Security, System Operations Support Center (SOSC), (202) 267- 8276, is

responsible for the coordination, planning, and timely communication of POTUS, VPOTUS, FLOTUS, or USSS supported VIP movements and associated security measures.

**b.** Tactical Operations Security is responsible for the real-time coordination of POTUS, VPOTUS, FLOTUS, or USSS supported VIP movement and tactical adjustments to security initiatives as coordinated with the USSS.

**c.** Tactical Operations Security personnel, working in conjunction with the USSS, are the final authority on adjustments to or implementation of no-notice security measures regarding POTUS, VPOTUS, FLOTUS, or USSS supported VIP movement.

**d.** All security initiative coordination regarding POTUS, VPOTUS, FLOTUS, or USSS supported VIP movements will be coordinated on the DEN. At no time should the exact location of be transmitted over the DEN.

**e.** Presidential Prohibited Areas (P-56A & B, P-40, etc.) are coordinated and managed by Strategic Operations Security working in concert with the USSS. The System Operations Support Center (SOSC), 202-267-8276, is responsible for waivers to prohibited areas. Tactical Operations Security is responsible for the real time coordination of Prohibited Area violations. Field facilities are responsible for the tracking and processing of violators.

**f.** All security related requests to ATC facilities from external agencies (for example, Air and Marine Operations Center [AMOC], Federal Bureau of Investigation [FBI], USSS, etc.), unless critical or a life or death situation, must be referred to the DEN at (202) 493-4170.

### 20-4-3. SPECIAL INTEREST FLIGHTS (SIFs)

**a.** Special Interest Flights identified by FAA, the Department of Defense or other national security agencies are the responsibility of Tactical Operations Security and shall be coordinated on the DEN real time.

**b.** Tactical Operations Security, System Operations Support Center, 202-267-8276, is responsible

for advanced coordination regarding special interest flights from State Department designated special interest countries known to the Agency.

#### **20-4-4. CONTINUITY OF OPERATIONS AND CONTINUATION OF GOVERNMENT (COOP/COG)**

**a.** Strategic Operations Security is responsible to establish Agency policies and procedures regarding COOP/COG activities.

**b.** Tactical Operations Security is responsible for the coordination and accomplishment of Agency COOP/COG initiatives upon activation.

**c.** Tactical Operations Security, in conjunction with appropriate agencies, is the final authority regarding NAS operations involving COOP/COG activities.

#### **20-4-5. CLASSIFIED OPERATIONS**

**a.** Strategic Operations Security is responsible for the coordination and implementation of all classified operations that impact the NAS.

**b.** Tactical Operations Security is responsible for the tactical coordination of classified operations in the NAS. Tactical Operations Security, in coordination with appropriate agencies, is the final authority regarding classified operations within the NAS.

#### **20-4-6. INTELLIGENCE ANALYSIS AND COMMUNICATION**

**a.** Tactical Operations Security shall provide staffing at operational locations where intelligence and threat assessments potentially impacting the NAS are processed and reviewed.

**b.** Tactical Operations Security is responsible to communicate any intelligence/threat concerns with potential NAS impact to the Director, System Operations Security.

**c.** Tactical Operations Security personnel are responsible to correlate the feasibility of threats and the potential impact to the NAS.

**d.** Tactical Operations Security will work in conjunction with Strategic Operations Security to amend and/or implement national security procedures to mitigate any potential threats to the NAS.

## Section 5. Coordination

### 20-5-1. COORDINATION

Coordinate through verbal and automated methods. When available, use tools that permit common situational awareness.

### 20-5-2. COMMUNICATION AND DOCUMENTATION

a. When time and mission requirements permit, utilize communication techniques that emphasize consensus decision making.

b. In a tactical situation, verbal communication will be sufficient for the exercising of the authority within this section.

c. The NAS Daily Security Report will be maintained by an ATSC and will be utilized to record any verbal decisions and operational security matters within the NAS.

### 20-5-3. RESPONSIBILITIES

a. System Operations Security shall:

1. Coordinate with all facilities affected by a pending or recurring security measure.

2. Ensure interagency coordination regarding any security measure within the NAS.

3. Facilitate coordination between defense/security forces and air traffic facilities.

4. Initiate inquiries regarding ATC involvement in security infractions.

b. Field facilities shall:

1. Communicate and coordinate with System Operations Security and external agencies regarding security measures and associated operations in the NAS.

2. Report aviation security incidents in a timely manner.

3. Utilize the DEN for the communication of potential security related issues.

4. Ensure compliance with Agency security policies and tactical decisions.

5. Remain responsible for the safety of air traffic while achieving compliance with security initiatives.



# Index

[References are to page numbers]

## A

Administration of Facilities  
 ATS Continuity, 2-1-2  
 Authorization for Separation, 2-1-6  
 Checking Published Data, 2-1-2  
 Duty Familiarization, 2-2-1  
 Equipment Trouble, 2-2-5  
 Facility Directives Repository, 2-2-6  
 Handling MANPADS Incidents, 2-1-4  
 Interregional Requirements, 2-1-1  
 Position Responsibilities, 2-2-1  
 Position/Sector Binders, 2-1-1  
 Reference Files, 2-1-1  
 Release of Information, 2-1-1  
 Sign In/Out and On/Off Procedures, 2-2-3  
 Standard Operating Procedures, 2-1-1  
 VSCS Equipment, 2-2-5

Air Traffic Control Assigned Airspace (ATCAA),  
 2-1-10

Air Traffic Security Coordinator (ATSC), 20-3-1

Air Traffic Tactical Operations Programs, 17-2-1

Aircraft  
 DOE, 5-3-1  
 Accidents, Reported/Unreported, 5-3-1  
 Atmosphere Sampling, 5-3-1  
 Due Regard Operations, 5-3-1  
 Special Flights, 5-3-1  
 Weather Reconnaissance Flights, 5-3-2

Flight Inspection, 5-2-1

High Altitude Inspections, 5-2-1

Identification Problems, 2-1-6

Identifying DOT/FAA, 5-2-1

Open Skies Treaty Aircraft Priority Flights (F  
 and D), 5-3-3

R & D Flight, 5-2-1

Airport, Traffic Patterns, 2-1-9

Airport Arrival Rate (AAR), 10-7-1

Airport Emergency Plans, 2-1-4

Airport Lighting, 10-6-1

Altimeter Requirements, 2-10-1

Altimeter Setting to ARTCC, 2-10-2

Altitude Assignments, S/VFR and VFR, 3-9-3

Appearance, 2-7-1

Approach Control Ceiling, 2-1-6

Approach Light Systems, 10-6-2

ARFF, 2-1-4

ARTCC to ARTCC Coordination, 17-7-2  
 Procedures, 17-7-2  
 Responsibilities, 17-7-2

ATIS, 10-4-1

ATSC. *See* Air Traffic Security Coordinator

Automated Position Sign On/Off, 4-6-5

## B

Bird Hazards, 2-1-7

Blood Donors, 2-8-2

Bomb Threats, 2-1-3

Briefing, Air Traffic Bulletin, 2-2-5

Briefings, Order Changes, 2-2-5

## C

Capping and Tunneling, 17-6-4

Charts  
 Disposition of Obsolete, 2-1-9  
 EOVM, 3-9-4  
 Minimum Vectoring Altitude, 3-9-1

Classified Operations, 20-4-2

Color Displays-Terminal, Color Use on ATC  
 Displays, 3-10-1

Combine/Recombine an ATCT/TRACON, 2-1-10

Communications  
 Battery-powered Transceivers, 3-3-2  
 CIRNOT Handling, 2-2-4  
 Emergency Frequencies, 3-3-1  
 Facility Status Report, 3-3-2  
 GENOT Handling, 2-2-4  
 Monitoring Frequencies, 3-3-1  
 Service "F", 3-3-1  
 Telephone, 3-3-1  
 Testing ELT, 3-3-2

**[References are to page numbers]**

Use of Communications, 3-2-1  
 FBI Use, 3-2-1  
 VSCS Frequency Backup, 3-3-2  
 VSCS Reconfigurations, 3-3-3  
 VTABS, 3-3-3

Comparison Checks, 2-10-1

Conferences  
 Coordination of Procedures, 4-2-1  
 Local, 4-2-1  
 Published Items, 4-2-1

Conflict Alert, 11-2-2

Continuity of Operations and Continuation of Government (COOP/COG), 20-4-2

COOP/COG. *See* Continuity of Operations and Continuation of Government

Coordination  
 Communication and Documentation, 20-5-1  
 Coordination, 20-5-1  
 Responsibilities, 20-5-1

Correspondence  
 Disposition of VAR, 4-5-2  
 Irregular Operation, 4-1-1  
 Letters of Procedures, 4-5-1  
 Letters to Airmen, 4-5-1  
 Policy/Procedures, 4-1-1  
 Preliminary Environmental Review, 4-1-1  
 Service Area Review, 4-1-1  
 Standards, 4-1-1

**D**

DEN. *See* Domestic Events Network

Density Altitude Broadcast, 2-10-2

Derelict Balloons/Objects, 18-5-1

Direction Finders  
 Antenna Site, 3-6-1  
 ASR-Associated, 3-6-2  
 Assigning Heading Using DF/ASR, 3-6-2  
 Canceling DF, 3-6-2  
 Commissioning Equipment, 3-6-1  
 Equipment Limitations, 3-6-1  
 Inaccurate Bearing Indication, 3-6-1  
 Operating Procedures, 3-6-1  
 Strobe Line Indication, 3-6-1

Domestic Events Network (DEN), 20-4-1

DTM, 11-2-3

**E**

ELT Incident, 9-3-1

En Route  
 Areas of Operation, 6-1-1  
 Areas of Specialization, 6-1-1  
 Computer Interface, 6-6-1  
 Flight Progress Strip, Usage, 6-1-2  
 General, 6-1-1  
 Operating Position Designators, 6-1-1  
 Operations, 6-3-1  
 Sector Information Binders, 6-2-1  
 Sectors, 6-1-1  
 Configuration, 6-1-1  
 Services, 6-4-1  
 Stored Flight Plan, 6-5-1  
 Stored Flight Plan Program  
 Bulk Store File  
 Maintenance, 6-5-2  
 Preparation, 6-5-2  
 Coordination, 6-5-2  
 Criteria, 6-5-1  
 Implementation, 6-5-2  
 Remarks Data, 6-5-2

En Route Data  
 Deficiencies, 7-2-1  
 Performance, 7-1-1

Equipment  
 Frequencies, 15-2-1  
 General, 15-1-1

Establishing Diverse Vector Area, 3-9-6

Explosives Detection, 2-1-5

**F**

Facility  
 Identification, 2-1-9  
 Visitors, 2-7-1

Facility Directives Repository (FDR), 2-2-6

Facility Equipment  
 Basic, 3-1-1  
 Color Displays-Terminal, 3-10-1  
 Generator Transfer Procedures, 3-1-2  
 Maintenance, 3-1-1

**[References are to page numbers]**

Facility Statistical Data  
 Aircraft Contacted, 16-2-1  
 Amending and Reviewing Data, 12-5-1  
 Flight Plan Count, 16-3-1  
 General, 12-1-1, 16-1-1  
 Instrument Approach, 9-2-1  
 Itinerant Operations, 12-2-1  
 Local Operations, 12-3-1  
 Operational Count, 9-1-1  
 Other Reports and Forms, 9-3-1  
 Overflight Operations, 12-4-1  
 Pilot Briefing Count, 16-4-1  
 Printing of Lists and Tallies (Model 1 Full Capacity), 16-6-1  
 Reports and Information, 16-5-1  
 Familiarization/Currency Requirements, 2-3-1  
 FDR. *See* Facility Directives Repository  
 Field Facilities, 20-2-1  
 Flight Request  
 Aerobatic Practice, 5-4-3  
 Certifying Record Attempts, 5-4-2  
 Crop Duster/Antique, 5-4-2  
 Deviation, 5-4-1  
 Flight Test, 5-4-2  
 Photogrammetric Flights, 5-4-3  
 Sanctioned Speed, 5-4-2  
 Flight Service Operations  
 General, 13-1-1  
 Operations, 13-3-1  
 Positions/Services, 13-2-1  
 Services, 13-4-1  
 Flight Plan, Prefiled, 13-4-1  
 Flight Service Station  
 Operations  
 Airport, Search Arrangements, 13-3-1  
 Landing Area, Status Check, 13-3-1  
 Liaison Visits, 13-3-1  
 Tie-In NOTAM Responsibility, 13-3-1  
 Position/Service Information Binders, Position/Services, 13-2-1  
 FOIA  
 Accident/Incident, 4-8-1  
 Computer Data, 4-8-1  
 Preserve Tape, 4-8-1  
 Forms  
 7210-8, 9-3-1, 9-3-3  
 7230-10, 4-6-3, 4-6-8  
 7230-12, 9-2-1, 9-2-2

7230-13, 16-5-1  
 7230-14, 9-1-3, 9-1-4  
 7230-16, 9-2-1  
 7230-4, 4-6-1, 4-6-7, 17-5-4  
 7233-1, 16-3-1, 16-4-1  
 7233-4, 16-3-1, 16-4-1  
 7233-5, 16-4-1  
 7233-6, 16-5-2  
 7460-2, 11-2-2, 11-4-1  
 Preparation, 4-6-1

**G**

Gate Hold Procedures, 10-4-2

**H**

Hours of Duty, 2-4-1  
 Service Hours, 2-4-1  
 Status of Service, 2-4-1

**I**

Information, Law Enforcement, 2-2-5  
 Intelligence Analysis and Communication, 20-4-2

**L**

Law Enforcement, Cooperation with, 2-7-1  
 LAWRS Hours of Operation, 2-9-1  
 Legal Liabilities of Personnel, 2-2-1  
 Letters of Agreement, 4-3-1  
 Aircraft Call Signs, 4-4-1  
 AIT, 4-3-6  
 Approval, 4-3-3  
 Cancellation, 4-3-4  
 Developing, 4-3-2  
 Operations Under Exemptions, 4-4-1  
 Review, 4-3-3  
 Revisions, 4-3-3  
 RSU, 4-4-1  
 Subjects, 4-3-2  
 Line of Authority  
 Air Traffic Security Coordinator (ATSC), 20-3-1  
 System Operations Security, 20-3-1

**[References are to page numbers]****M**

MANPADS, Handling MANPADS Incidents,  
2-1-4

## Maps, Video

Common Reference Points, 3-8-2  
Intensity, 3-8-1  
Mapping Standards, 3-8-1  
Tolerance for Fix Accuracy, 3-8-1  
Video Map Data, 3-8-1

MCI, 11-2-2

## Medical, 2-8-1

Alcohol, 2-8-2  
Clearance Requirements, 2-8-1  
Drugs and Sedatives, 2-8-1  
Special Evaluations, 2-8-1  
Status, 2-8-2

## Meteorological Services and Equipment

Broadcasts, 14-4-1  
EFAS, 14-3-1  
General, 14-1-1  
Weather Briefing, 14-2-1

MIA, 10-4-6

Military Headquarters, 1-1-2

MSAW, 11-2-2

**N**

NAS Changes, 3-1-1

## NAS En Route Automation

Displays, 8-3-1  
General, 8-1-1  
Procedures, 8-2-1

National Playbook, 17-20-1

## National Programs

ATTS, 11-2-1  
Data Recording and Retention, 11-3-1  
Helicopter Route Chart, 11-6-1  
Standard Terminal Automation Replacement System (STARS), 11-8-1  
Terminal Area VFR Route, 11-7-1  
Terminal VFR Radar Services, 11-1-1  
TPX-42, 11-4-1  
VFR Planning Chart, 11-5-1

National Traffic Management Log, 17-5-1

## Navigational Aids

Malfunctions, 3-5-2  
Monitoring, 3-5-1  
Originating NOTAMs, 3-5-2

**O**

Ocean21, 6-8-1

Controller Pilot Data Link Communications,  
6-8-2

Error Repair Position Responsibilities, 6-8-1

Facility Manager Responsibilities, 6-8-1

General, 6-8-1

Ocean21 Channel Changeovers, 6-8-2

Operational Supervisor-In-Charge Responsibilities,  
6-8-1

Outages, 6-8-2

Transfer of Position, 6-8-2

Operational Suitability, 11-2-2

Operations Plan, 17-19-1

Operations Security, Strategic and Tactical  
Coordination, 20-5-1

Line of Authority, 20-3-1

Organizational Missions, 20-1-1

Organizational Responsibilities, 20-2-1

Supplemental Duties, 20-4-1

## Organizational Missions

Strategic Operations Security Mission, 20-1-1

System Operations Security Mission, 20-1-1

Tactical Operations Security Mission, 20-1-1

## Organizational Responsibilities

Field Facilities, 20-2-1

Strategic Operations Security, 20-2-1

Tactical Operations Security, 20-2-1

Outdoor Laser Demonstrations, 2-1-9

**P**

Pilot Education, 4-2-1

Practice Instrument Approaches, 10-4-2

Precision Approach Path Indicator (PAPI) Systems,  
10-6-3

Precision Obstacle Free Zone (POFZ), 10-1-6

Precision Runway Monitor-Simultaneous Offset  
Instrument Approaches, 10-4-4



**[References are to page numbers]**

## Presidential Aircraft

- Communications Circuits, Use of, 5-1-2
- Coordination, 5-1-1, 5-1-3
- Monitoring, 5-1-2
- Movement, 5-1-3
- Rescue Support, 5-1-3
- Security of Information, 5-1-2

## Presidential Movement, 20-4-1

## Pretaxi Clearance Procedures, 10-4-1

## Prohibited/Restricted Areas, 2-1-7

**Q**

## Quality Assurance Review, 4-6-1

**R**

## Radar Use, 3-7-2

- Beacon System, 3-7-2
- Commissioning Facilities, 3-7-1
- Monitoring Mode 3/A Codes, 3-7-2
- Prearranged Coordination, 3-7-3
- System and Display Setting, 3-7-3
- Target Sizing, 3-7-3

## Recorders, Tape

- Assignment of Channels, 3-4-1
- Use of, 3-4-1
- VSCS Data Retention, 3-4-3

## Recording Equipment

- Checking and Changing, 3-4-2
- Handling Tapes, DATs or DALR Storage, 3-4-2

## Records

- Collection of Data, 4-6-1
- Facility, 4-6-1

## Reduced Separation on Final, 10-4-5

## Reduced Vertical Separation Minimum, 6-9-1

- Equipment Suffix and Display Management, 6-9-2
- Facility Manager Responsibilities, 6-9-1
- Front-Line Manager-In-Charge/Controller-In-Charge Responsibilities, 6-9-2
- General, 6-9-1
- Mountain Wave Activity, 6-9-2

## Non-RVSM Operator Coordination Requirements, 6-9-2

## Operations Manager-In-Charge Responsibilities, 6-9-1

## Suspension of RVSM, 6-9-3

## Wake Turbulence and Weather Related Turbulence, 6-9-2

## Regulatory Information

## Authorizations and Exemptions, 18-3-1

## Fixed-wing SVFR, 18-2-1

## Moored Balloons, Kites, and Unmanned Rockets, 18-5-1

## Parachute Jump, 18-4-1

## Temporary Flight Restrictions, 19-1-1

## Waivers and Authorizations, 18-1-1

## Reports

## Delay Reporting, 4-7-1

## Monthly, 4-7-1

## System Impact, 4-7-1

## Unidentified Flying Object, 4-7-1

## Route Advisories, 17-18-1

## Runway

## Intersection Takeoffs, 2-1-5

## Obstacle Identification, 2-1-9

## RVV/RVR Equipment, 2-9-2

**S**

## Safety Logic Systems Supervisor/CIC Procedures, 11-9-1

## Ensure Status, 11-9-1

## Limited Configuration, 11-9-2

## Monitor Alerts and Ensure Corrective Action, 11-9-2

## System Operation, 11-9-1

## Watch Checklist, 11-9-2

## Security, 2-7-1

SIFs. *See* Special Interest Flights

## Special Interest Flights (SIFs), 20-4-1

## Strategic Operations Security, 20-2-1

## Strategic Operations Security Mission, 20-1-1

## SUA and PAJA Frequency Information, 2-1-10

**[References are to page numbers]****Supplemental Duties**

- Classified Operations, 20-4-2
- Continuity of Operations and Continuation of Government (COOP/COG), 20-4-2
- Domestic Events Network (DEN), 20-4-1
- Intelligence Analysis and Communication, 20-4-2
- Presidential Movement, 20-4-1
- Special Interest Flights (SIFs), 20-4-1

**Suspicious Activities, 2-7-1**

- System Operations Security, 20-3-1
- Operations Security, Strategic and Tactical, 20-1-1

**System Operations Security Mission, 20-1-1****T****T & A Recording, 4-6-6**

- Tactical Operations Security, 20-2-1
- Tactical Operations Security Mission, 20-1-1
- Takeoff Clearance, 10-3-4
- Temporary Flight Restrictions, 19-1-1
- Terminal Operations, Services, and Equipment
  - Airport Arrival Rate (AAR), 10-7-1
  - General, 10-1-1
  - Lighting, 10-6-1
  - Operations, 10-3-1
  - Position Binders, 10-2-1
  - Radar, 10-5-1
  - Services, 10-4-1
- Time Checks, 2-4-1
- Time Standards, 2-4-1
- Traffic Lights, Gates, and Signals, 3-1-1

**Traffic Management**

- ARTCC to ARTCC Coordination, 17-7-2
- Coded Departure Routes, 17-17-1
- Coordination, 17-5-1
- Flow Constrained Area (FCA), 17-7-1
- Flow Evaluation Area (FEA), 17-7-1
- Ground Delay Programs, 17-9-1
- Ground Stop(s), 17-10-1, 17-11-1
- Initiatives, 17-6-1
- Line of Authority, 17-3-1

- Monitor Alert Parameter, 17-8-1
- North American Route Program, 17-16-1
- Organizational Missions, 17-1-1
- Preferred IFR Routes Program, 17-15-1
- Responsibilities, 17-2-1
- Severe Weather Management, 17-13-1
- Special Programs, 17-12-1
- Supplemental Duties, 17-4-1
- SWAP, 17-14-1

**Traffic Management (TM) Support of Non-Reduced Vertical Separation Minima (RVSM) Aircraft, 17-21-1****U****Unauthorized Laser Illumination of Aircraft, 2-1-10****URET. See User Request Evaluation Tool****User Request Evaluation Tool**

- Computer Data Retention, 6-7-4
- Outages, 6-7-2
- Responsibilities, Front-Line Manager-in-Charge, 6-7-1
- Responsibilities, Facility Manager, 6-7-1
- Responsibilities, Operations Manager-in-Charge, 6-7-1
- Restrictions Inventory and Evaluation, 6-7-3
- Standard Use of Automated Flight Data Management, 6-7-2
- Traffic Counts and Delay Reporting, 6-7-3
- Transfer of Position Responsibility, 6-7-4
- Transition and Training Planning, 6-7-3
- URET Airspace Configuration Elements, 6-7-2
- Waiver, Interim Altitude Requirements, 6-7-4

**V****VFR Waypoint Chart Program, 11-10-1**

- Criteria, 11-10-1
- Definition, 11-10-1
- Policy, 11-10-1
- Responsibilities, 11-10-2

**Video Maps, 11-2-3****Visual Approach Slope Indicator (VASI) Systems, 10-6-3**

**[References are to page numbers]****W**

- Washington, DC, Special Flight Rules Area (DC SFRA), 2-1-8
- Watch Coverage, 2-5-1
  - Area Supervision, 2-5-1
  - CIC, 2-5-2
  - Consolidating Positions, 2-5-2
  - Holiday Staffing, 2-5-2
  - Overtime Duty, 2-5-2
  - Relief Periods, 2-5-1
  - Schedules, 2-5-1
  - Supervision Coverage, 2-5-1
  - Supervisors Hours of Duty, 2-5-2
- Watch Supervision
  - Assignments, 2-6-1
  - Basic Watch Schedule, 2-6-3
- CIC, 2-6-1
- Consolidating Positions, 2-6-2
- Controller-in-Charge Designation, 2-6-2
- Controller-in-Charge Selection, 2-6-2
- Holiday Staffing, 2-6-3
- Manager, 2-6-1
- Overtime Duty, 2-6-3
- Relief Periods, 2-6-3
- Supervisor, 2-6-1
- Weather/Visibility, 2-9-1
  - Dissemination, 2-9-1
  - Record Center, 2-9-2
  - Visibility Charts, 2-9-2
  - Visual Observations, 2-9-2
- Wind Indicator Cross Check, 2-10-1
- Wind Instrument Sensors, 2-10-1



# BRIEFING GUIDE

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

## Table of Contents

| <b>Paragraph<br/>Number</b> | <b>Title</b>   | <b>Page</b> |
|-----------------------------|--|-------------|
| 2-1-12                      | INTERSECTION TAKEOFFS .....  | 3           |
| 2-1-28                      | SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES .....   | 3           |
| 2-2-4                       | DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION<br>RESPONSIBILITY .....                                  | 3           |
| 2-3-3                       | REQUIREMENTS .....   | 4           |
| 2-6-1                       | WATCH SUPERVISION .....  | 4           |
| 2-6-5                       | CONSOLIDATING POSITIONS .....  | 5           |
| 10-3-8                      | TAXI INTO POSITION AND HOLD (TIPH) OPERATIONS .....  | 5           |
| 3-4-3                       | CHECKING AND CHANGING RECORDER TAPES .....   | 7           |
| 3-4-4                       | HANDLING RECORDER TAPES OR DATs .....  | 7           |
| 3-9-2                       | MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION<br>(TERMINAL/MEARTS) .....                            | 10          |
| 3-9-5                       | MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION<br>(TERMINAL/MEARTS) .....                            | 12          |
| 4-3-2                       | APPROPRIATE SUBJECTS .....   | 17          |
| 4-6-4                       | FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION .....  | 18          |
| 4-6-5                       | PREPARATION OF FAA FORM 7230-4 .....   | 18          |
| 10-3-10                     | MULTIPLE RUNWAY CROSSINGS .....  | 20          |
| 10-6-9                      | RUNWAY EDGE LIGHTS ASSOCIATED WITH MEDIUM APPROACH LIGHT<br>SYSTEM/RUNWAY ALIGNMENT INDICATOR LIGHTS ..... | 21          |
| 17-20-3                     | DEFINITION .....   | 22          |
| 20-3-3                      | AIR TRAFFIC SECURITY LIAISON (ATSL) .....  | 22          |
| 20-4-2                      | PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED<br>VIP MOVEMENT) .....                          | 23          |
| 20-4-3                      | SPECIAL INTEREST FLIGHTS (SIFs) .....  | 23          |

**1. PARAGRAPH NUMBER AND TITLE:** 2-1-12. INTERSECTION TAKEOFFS

**2. BACKGROUND:** The airport service uses the concept of “declared distances” to achieve certain airport design criteria. These distances are for preflight performance planning only and must not be used for air traffic control purposes.

**3. CHANGE:**

|                                      |
|--------------------------------------|
| <u><b>OLD</b></u>                    |
| <b>2-1-12. INTERSECTION TAKEOFFS</b> |
| title through a                      |
| Add                                  |

|                                      |
|--------------------------------------|
| <u><b>NEW</b></u>                    |
| <b>2-1-12. INTERSECTION TAKEOFFS</b> |
| No Change                            |

***NOTE-***  
***Some airports publish “declared distances” for a particular runway. These are published in the Airport Facility Directory (A/FD) or the Aeronautical Information Publication (AIP), and there is no requirement that facility personnel be made aware of them. These distances are a means of satisfying airport design criteria and are intended to be used by pilots and/or operators for preflight performance planning only. There are no special markings, signage, or lighting associated with declared distances, and they do not limit the actual runway available for use by an aircraft. Therefore, they cannot be used for any air traffic control purpose. If pilots inquire about the existence of declared distances, refer them to the A/FD or the AIP.***

**1. PARAGRAPH NUMBER AND TITLE:** 2-1-28. SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES

**2. BACKGROUND:** In light of several recent loss of communication events in the National Airspace System, a multidisciplinary team reviewed and analyzed how to improve air traffic control operations regarding the establishment, transfer, and loss of communications with aircraft. Additionally, the process of promptly notifying the DEN needs to be clarified.

**3. CHANGE:**

|                   |
|-------------------|
| <u><b>OLD</b></u> |
| Add               |
| Add               |

|   |
|---|
| <u><b>NEW</b></u>   |
| <b><u>2-1-28. SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES</u></b>  |
| <b><u>Facility air traffic managers must ensure that processes are in place to direct prompt notification to the DEN of any suspicious aircraft/pilot activities as prescribed in FAA Order JO 7610.4, paragraph 7-3-1.</u></b> |

**1. PARAGRAPH NUMBER AND TITLE:** 2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY

**2. BACKGROUND:** In light of several recent loss of communication events in the National Airspace System, a multidisciplinary team reviewed and analyzed how to improve air traffic control operations regarding the establishment, transfer, and loss of communications with aircraft. This document change is based on the recommendations of the team.

3. CHANGE:

**OLD**

**2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY**  
 title through **b1(a)(14)**  
**(15) TRAFFIC.**

**NEW**

**2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY**  
 No Change  
**(15) COMMUNICATION STATUS and TRAFFIC.**

1. PARAGRAPH NUMBER AND TITLE: 2-3-3. REQUIREMENTS

2. **BACKGROUND:** The Eastern Service Area Operations Support Group requested an official interpretation on whether or not the Flight Data position was considered a “control” position and whether or not time accumulated while working the Flight Data communications, Flight Data, and Clearance Delivery position(s) would satisfy the currency requirements as identified in paragraph 2-3-3 of this order. The FAA reviewed this request and determined that these position(s) do not meet the requirement for currency as identified in this order. This decision was administered through an official interpretation.

3. CHANGE:

**OLD**

**2-3-3. REQUIREMENTS**  
 title through **b1(b)**  
**NOTE-**  
*Although the OSIC position is an operational position, time working as an OSIC is not counted toward currency time.*

**NEW**

**2-3-3. REQUIREMENTS**  
 No Change  
**NOTE-**  
1. Although the OSIC position is an operational position, time working as an OSIC is not counted toward currency time.  
2. Time working Flight Data communications, Flight Data, or Clearance Delivery positions does not count towards currency requirements.

1. PARAGRAPH NUMBER AND TITLE: 2-6-1. WATCH SUPERVISION

2. **BACKGROUND:** On September 15, 2008, the FAA convened an internal workgroup to review National Transportation Safety Board (NTSB) Safety Recommendation A-07-048. This NTSB proposal recommended that controllers should refrain from performing administrative tasks, (for example, traffic count) when moving aircraft that are in the controller’s area of responsibility (AOR).

3. CHANGE:

**OLD**

**2-6-1. WATCH SUPERVISION**  
 title through **a11**  
 Add

**NEW**

**2-6-1. WATCH SUPERVISION**  
 No Change  
**(12) Administrative duties must not be accomplished to the detriment of any operational duty.**



**1. PARAGRAPH NUMBER AND TITLE:** 2-6-5. CONSOLIDATING POSITIONS; and, 10-3-8. TAXI INTO POSITION AND HOLD (TIPH) OPERATIONS

**2. BACKGROUND:** In FAA directives, an air traffic controller's instruction for a pilot to taxi onto the runway and await takeoff clearance is "position and hold." The International Civil Aviation Organization (ICAO) equivalent of this instruction is "line up and wait."

In July 2000, the National Transportation Safety Board (NTSB) recommended that FAA Order 7110.65 be amended to require the use of standard ICAO phraseology for airport surface operations (NTSB Recommendation A-00-71). In addition, the Air Traffic Procedures Advisory Committee (ATPAC) has requested the FAA to revise U.S. policy to require the use of "line up and wait" rather than "position and hold." Additionally, the FAA Runway Safety Call to Action Committee issued several recommendations to address improving runway safety across the NAS.

In response to these recommendations, the Air Traffic Organization, Terminal Service (ATO-T) convened a Safety Risk Management (SRM) panel of subject matter experts to evaluate the recommendations. The objective of the SRM Panel was to identify and assess the risks associated with changing the current phraseology from "position and hold" to "line up and wait" per NTSB Recommendation A-00-71.

**3. CHANGE:**

**OLD**

**2-6-5. CONSOLIDATING POSITIONS**

title through b

c. When conducting TIPH operations, local control position shall not be consolidated/combined with any other non-local control position.

**REFERENCE-**

FAAO JO 7210.3, Para 10-3-8, Taxi Into Position and Hold (TIPH) Operations.

**OLD**

**10-3-8. TAXI INTO POSITION AND HOLD (TIPH) OPERATIONS**

a. The Air Traffic (AT) Manager shall:

1. Determine an operational need exists before conducting TIPH operations.

2. Before authorizing TIPH operations, conduct a review of the impact that airport configuration and local conditions may have on the application of TIPH procedures.

3. Prepare a facility directive prescribing:

(a) Local procedures for conducting these operations.

(b) Methods to assist the local controller in maintaining awareness of aircraft positions on the airport, i.e., annotating flight progress strips or marking the location of aircraft with color-coded chips on a magnetic diagram of the airport.

**REFERENCE-**

FAAO JO 7210.3, Para 10-1-7, Use of Active Runways.

(c) The consolidation and staffing of positions.

**NEW**

**2-6-5. CONSOLIDATING POSITIONS**

No Change

c. When conducting line up and wait (LUAW) operations, local control position must not be consolidated/combined with any other non-local control position.

**REFERENCE-**

FAAO JO 7210.3, Para 10-3-8, Line Up and Wait (LUAW) Operations

**NEW**

**10-3-8. LINE UP AND WAIT (LUAW) OPERATIONS**

a. The ATM must:

1. Determine an operational need exists before conducting LUAW operations.

2. Before authorizing LUAW operations, conduct a review of the impact that airport configuration and local conditions may have on the application of LUAW procedures.

3. Prepare a facility directive prescribing:

(a) Local procedures for conducting these operations.

(b) Methods to assist the local controller in maintaining awareness of aircraft positions on the airport, for example, annotating flight progress strips or marking the location of aircraft with color-coded chips on a magnetic diagram of the airport.

**REFERENCE-**

FAAO JO 7210.3, Para 10-1-7, Use of Active Runways

(c) The consolidation and staffing of positions.

(d) The requirements necessary for issuing a landing clearance with an aircraft holding in position.

**3(d)(1) through 3(d)(3)**

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-4, Taxi Into Position and Hold (TIPH), subpara c1.

FAAO JO 7110.65, Para 3-10-5, Landing Clearance, subpara b.

(e) Runway geometry, i.e., the physical configuration of runways and other airport movement areas.

(f) Weather conditions, time of day, i.e., prevailing light conditions.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-4, Taxi into Position And Hold (TIPH), subpara c1 and g.

(g) Fleet mix.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-6, Same Runway Separation.

FAAO JO 7110.65, Para 3-9-7, Wake Turbulence Separation For Intersection Departures.

FAAO JO 7110.65, Para 3-9-8, Intersecting Runway Separation.

(h) Traffic volume; complexity restrictions.

(i) Obstructions or limitations to visibility from controller-to-aircraft and aircraft-to-aircraft perspectives.

4. Local control position must not be consolidated/combined with any other non-local control position. For example, local control must not be consolidated/combined with the front-line manager/controller-in-charge (CIC) position, clearance delivery, flight data, ground control, cab coordinator, etc. Local control can be combined with other local control positions to include tower associate (local assist) or local monitor position. When a Class B/helicopter position with defined control tower airspace is established, this position can be combined with local control.

5. The tower associate (local assist) position or a local monitor position must be staffed to permit more than one aircraft at a time to taxi into position and hold on the same runway between sunrise and sunset.

6. The front-line manager/CIC position should not be combined with any other position.

7. Ensure front-line managers/CICs review para 2-6-1a, Watch Supervision, with an emphasis on maintaining situational awareness and management of the operational environment with a goal toward eliminating distractions.

(d) The requirements necessary for issuing a landing clearance with an aircraft holding in position:

No Change

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-4, Line Up and Wait (LUAW), subpara c1

FAAO JO 7110.65, Para 3-10-5, Landing Clearance, subpara b

(e) Runway geometry, for example, the physical configuration of runways and other airport movement areas.

(f) Weather conditions, time of day, for example, prevailing light conditions.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-4, Line Up and Wait (LUAW), subpara c1 and g.

(g) Fleet mix.

**REFERENCE-**

FAAO JO 7110.65, Para 3-9-6, Same Runway Separation

FAAO JO 7110.65, Para 3-9-7, Wake Turbulence Separation for Intersection Departures

FAAO JO 7110.65, Para 3-9-8, Intersecting Runway Separation

(h) Traffic volume; complexity restrictions.

(i) Obstructions or limitations to visibility from controller-to-aircraft and aircraft-to-aircraft perspectives.

4. Local control position must not be consolidated/combined with any other non-local control position. For example, local control must not be consolidated/combined with the front-line manager/controller-in-charge (CIC) position, clearance delivery, flight data, ground control, cab coordinator, etc. Local control can be combined with other local control positions to include tower associate (local assist) or local monitor position. When a Class B/helicopter position with defined control tower airspace is established, this position can be combined with local control.

5. The tower associate (local assist) position or a local monitor position must be staffed to permit more than one aircraft at a time to LUAW on the same runway between sunrise and sunset.

6. The front-line manager/CIC position should not be combined with any other position.

7. Ensure front-line managers/CICs review para 2-6-1a, Watch Supervision, with an emphasis on maintaining situational awareness and management of the operational environment with a goal toward eliminating distractions.

8. Do not authorize taxi into position and hold operations at an intersection between sunset and sunrise unless the following is implemented:

(a) The runway is used as a departure-only runway.

(b) Only one aircraft at a time is permitted to taxi into position and hold on the same runway.

(c) Document on FAA Form 7230-4, Daily Record of Facility Operation, the following: “TIPH at INT of RWY (number) and TWY (name) IN EFFECT” when using runway as a departure-only runway. “TIPH at INT of RWY (number) and TWY (name) SUSPENDED” when the runway is not used as a departure-only runway.

(d) At least 90 days before planned implementation, AT managers must submit the local directive outlining this operation for Terminal Operations and Terminal Safety and Operations Support approval. Terminal Operations and Terminal Safety and Operations Support directors shall be notified of any proposed operational changes (e.g., a change to the runway or taxiway for conducting TIPH operations).

b. AT managers must submit operational need for TIPH and a facility directive to the appropriate Director, Terminal Operations (service area office) for approval. AT managers must maintain a copy of the approval correspondence from Terminal Operations.

c. The Director, Terminal Operations, must ensure an annual review of TIPH operations is conducted for those facilities employing TIPH. The results of this review shall be sent to the Terminal Safety and Operations Support Office by September.

8. Do not authorize LUAW operations at an intersection between sunset and sunrise unless the following is implemented:

(a) The runway is used as a departure-only runway.

(b) Only one aircraft at a time is permitted to LUAW on the same runway.

(c) Document on FAA Form 7230-4, Daily Record of Facility Operation, the following: “LUAW at INT of RWY (number) and TWY (name) IN EFFECT” when using runway as a departure-only runway. “LUAW at INT of RWY (number) and TWY (name) SUSPENDED” when the runway is not used as a departure-only runway.

(d) At least 90 days before planned implementation, ATMs must submit the local directive outlining this operation for Terminal Operations and Terminal Safety and Operations Support approval. Terminal Operations and Terminal Safety and Operations Support directors must be notified of any proposed operational changes (for example, a change to the runway or taxiway for conducting LUAW operations).

b. ATMs must submit operational need for LUAW and a facility directive to the appropriate Director, Terminal Operations (service area office) for approval. ATMs must maintain a copy of the approval correspondence from Terminal Operations.

c. The Director, Terminal Operations, must ensure an annual review of LUAW operations is conducted for those facilities employing LUAW. The results of this review must be sent to the Terminal Safety and Operations Support office by September.

---

1. **PARAGRAPH NUMBER AND TITLE:** 3-4-3. CHECKING AND CHANGING RECORDER TAPES; and 3-4-4. HANDLING RECORDER TAPES OR DATs

2. **BACKGROUND:** Recording equipment within ARTCC, Terminal facilities, and the ATCSCC have been upgraded to use Digital Audio Legal recorders (DALR). Recordings are retained on hard drives as .wav files. This change adds DALR equipment usage in FAA Order JO 7210.3, Section 4, Recorders.

3. **CHANGE:**

OLD  
3-4-3. CHECKING AND CHANGING RECORDER TAPES

NEW  
3-4-3. CHECKING AND CHANGING REORDING EQUIPMENT

a. At En Route facilities and the ATCSCC, Technical Operations personnel shall be responsible for checking and changing recorder tapes or digital audio tapes (DAT).

**REFERENCE-**

*(Analog) FAAO JO 6670.4, Maintenance of Multichannel Recorder Equipment,*

*or*

*(Digital) FAAO JO 6670.13, Maintenance of Digital Voice Recorder (DVR) Equipment and FAAO JO 6670.15, Maintenance of Digital Voice Recorder System Series II (DVR II) Equipment.*

**b. At terminal and flight service facilities:**

**1.** Where recorders are not convenient to operating quarters, the facility air traffic manager and the Technical Operations local manager shall develop an agreement assigning the responsibility for checking and changing recorder tapes or DATs.

**2.** Where recorders are convenient to operating quarters, air traffic personnel shall perform recorder checks.

**c.** If air traffic personnel check and change tapes or DATs, the facility air traffic manager shall ensure that personnel are trained in the proper methods to be used.

**d.** Recorder monitor operation checks on analog voice recorder systems shall be performed daily and shall not exceed 26 hours between checks. Procedures for monitoring operations in analog recorders are described in FAAO JO 6670.4, Maintenance of Multichannel Recorder Equipment. On a daily basis (not to exceed 26 hours), validate the Nicelog supervision window for alarms and verify normal operation of equipment on digital voice recorder systems.. Indicate accomplishments of checks on FAA Form 7230-4, Facility Record of Operation.

Add

Add

Add

a. At En Route facilities and the ATCSCC, Technical Operations personnel **must** be responsible for checking and changing recorder tapes, digital audio tapes (DAT), **and Digital Audio Legal Recorders (DALR).**

**REFERENCE-**

*(Analog) FAAO JO 6670.4, Maintenance of Multichannel Recorder Equipment,*

*or*

*(Digital) FAAO JO 6670.13, Maintenance of Digital Voice Recorder (DVR) Equipment and FAAO JO 6670.15, Maintenance of Digital Voice Recorder System Series II (DVR II) Equipment.*

**b. At terminal and flight service facilities:**

**1.** Where recorders are not convenient to operating quarters, the facility air traffic manager and the Technical Operations local manager **must** develop an agreement assigning the responsibility for checking and changing recorder tapes, DATs, **and DALRs.**

**2.** Where recorders are convenient to operating quarters, air traffic personnel **must** perform recorder checks.

**c.** If air traffic personnel check and change tapes, DATs, **or DALRs,** the facility air traffic manager **must** ensure that personnel are trained in the proper methods to be used.

**d.** Recorder monitor operation checks on analog voice recorder systems **must** be performed daily and **must** not exceed 26 hours between checks. Procedures for monitoring operations in analog recorders are described in FAAO JO 6670.4, Maintenance of Multichannel Recorder Equipment.

**1. On a daily basis (not to exceed 26 hours), validate the Nicelog supervision window for alarms, and verify normal operation of equipment on digital audio tapes.**

**2. Indicate accomplishments of checks on FAA Form 7230-4, Facility Record of Operation.**

**e. At facilities using DALR:**

Add

**1. On a daily basis (not to exceed 26 hours), validate the Castle Rock SNMPc window for the alarms, and verify normal operation of the DALR system.**

Add

**2. Document the accomplishment of the check on FAA Form 7230-4, Facility Record of Operation.**

**OLD**

**NEW**

**3-4-4. HANDLING RECORDER TAPES OR DATS**

**3-4-4. HANDLING RECORDER TAPES, DATS, OR DALR STORAGE**

title through a3

No Change

b. Retain the tapes or DATs for 45 days, except:

**b. Retain the tapes or DATs for 45 days, and ensure the DALR .wav file is set to retain recordings for 45 days, except:**

1. En route facility utilizing system analysis recording tapes as their radar retention media (regardless of the type of voice recorder system being used) shall retain voice recordings for 15 days.

1. En route facility utilizing system analysis recording tapes as their radar retention media (regardless of the type of voice recorder system being used) **must** retain voice recordings for 15 days.

2. Those facilities utilizing an analog voice recorder system shall retain voice recordings for 15 days.

2. Those facilities utilizing an analog voice recorder system **must** retain voice recordings for 15 days.

3. The David J. Hurley Air Traffic Control System Command Center shall retain voice recordings for 15 days.

3. The David J. Hurley Air Traffic Control System Command Center **must** retain voice recordings for 15 days.

4. Accidents: Retain the tapes or DATs in accordance with FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting.

4. Accidents: Retain the tapes, DATs, **or DALRs** in accordance with FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting.

5. Incidents: Retain the tapes or DATs in accordance with FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting; and FAAO 1350.15, Records Organization, Transfer, and Destruction Standards.

5. Incidents: Retain the tapes, DATs, **or DALRs** in accordance with FAAO 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting; and FAAO 1350.15, Records Organization, Transfer, and Destruction Standards.

6. Hijacking: Retain all relevant tapes or DATs of hijackings from the time communication commences with the aircraft until communication has terminated. After 3 years, contact System Safety and Procedures for the release of the tapes or DATs. In every case, a release from System Safety and Procedures is required to return hijack tapes or DATs to service.

6. Hijacking: Retain all relevant tapes, DATs, **or DALRs** of hijackings from the time communication commences with the aircraft until communication has terminated. After 3 years, contact System Safety and Procedures for the release of the tapes, DATs, **or DALRs**. In every case, a release from System Safety and Procedures is required to return hijack tapes, DATs, **or DALRs** to service.

**1. PARAGRAPH NUMBER AND TITLE:** 3-9-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS)

**2. BACKGROUND:** Aeronautical Navigation (AeroNav) Products has advised that the current procedure for processing waiver requests to MVA criteria requires revision. The previous guidance did not require processing through the Service Center Flight Procedures Offices. Going forward, all MVA project submissions including those containing a waiver to criteria will be handled the same. After AeroNav Products review of a project, a waiver request will be forwarded to Flight Standards for review and approval. Subsequent approval will be noted in the project and returned to the facility. Additionally, facility MVA reviews and certification have been conducted on an annual basis. In 1993, Flight Standards changed from an annual review to a periodic review schedule of at least once every two years for all Terminal Instrument Approach Procedures. It is believed that this was the original basis for the annual review requirement for MVACs.

**3. CHANGE:**

**OLD**

**3-9-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS)**

Prepare a vectoring chart in accordance with the criteria contained in FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

a. MVA charts must be developed and maintained using the Sector Design and Analysis Tool (SDAT). Facility managers may request assistance in the development and maintenance of their MVAC or request SDAT user support by soliciting the Airspace and Aeronautical Information Management Office. MVACs developed in SDAT properly apply obstruction clearance criteria required by FAA Order 8260.3. SDAT completes FAA Form 7210-9, and automatically creates and sends the necessary data files to the National Aeronautical Charting Office, Radar Video Maps Section upon NFPO certification.

**NOTE-** through **e2***REFERENCE-*

**3.** The facility MVAC package must include a detailed account of the steps taken by the facility to determine if the sector will qualify for taking a ROC reduction in the sector. This data will be reviewed by the Service Center Operations Support Group (OSG) and National Flight Procedures Office (NFPO) personnel for ROC reduction approval. Service Center Operations Support personnel must be the approving authority for ROC reduction criteria compliance with subparas e1(a) and (b) above. Previously approved reductions in ROC justifications must be resubmitted for annual approval during a facility's recurring certification process.

**NOTE-** through **e4**

**NEW**

**3-9-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS)**

No Change

a. MVACs must be developed and maintained using the Sector Design and Analysis Tool (SDAT). Facility Managers may request assistance in the development and maintenance of their MVAC or request SDAT user support by soliciting the Mission Support Services, Geographic Services Group. MVACs developed in SDAT properly apply obstruction clearance criteria required by FAA Order 8260.3. SDAT completes FAA Form 7210-9 and automatically creates and sends the necessary data files to Mission Support Services, ATC Products Group upon certification.

No Change

**3.** The facility MVAC package must include a detailed account of the steps taken by the facility to determine if the sector will qualify for taking a ROC reduction in the sector. This data will be reviewed by the Service Center Operations Support Group (OSG) and the ATC Products Group personnel for ROC reduction approval. Service Center Operations Support personnel must be the approving authority for ROC reduction criteria compliance with paragraph e1(a) and (b) above. Previously approved reductions in ROC justifications must be resubmitted for approval during a facility's recurring certification process.

No Change

5. Ensure MVA areas submitted for ROC reductions do not cover large geographical areas that include locations that would not individually meet ROC reduction standards. In such cases, NFPO may work with the Service Center and the facility to design a sector that will pass the approval process for a particular approach/departure route.

**e6 through g**

**h.** Managers requesting to waive criteria contained in FAA Order 8260.3 must submit FAA Form 8260-1, Flight Procedures/Standards Waiver. This waiver form will contain the criteria requested to be waived, a full explanation of the operational need, and examples of how the facility will achieve an equivalent level of safety if approved. The waiver package will also include the SDAT derived FAA Form 7210-9. This package will be sent to the Service Center OSG who will then forward to the NFPO. The regional FPO is not included in this process. The NFPO forwards the package to the Flight Procedure Implementation and Oversight Branch. For the flight standards waiver process, facility managers do not need to complete a Safety Management System evaluation. An electronic copy of the completed package must be sent to the OSG and Terminal Safety and Operations Support.

**i through m**

**n.** Each request must include the SDAT generated Form 7210-9 with the manager's signature and point of contact at the submitting facility. Form 7210-9 must also be an electronic copy with the manager's signature and imported into the MVA project file. When applicable, each Form 7210-9 must include explanations/justifications for both ROC reduction and AAO additive rounding requests. The MVA request with the 7210-9 may be electronically forwarded to the OSG, but must be followed with a hard copy with original signatures. However, when the capability of electronic signatures are developed within SDAT, the 7210-9 will be transmitted electronically between the facility, Service Center, and NFPO in lieu of the paper process. SDAT will automatically store the approved MVAC package in the National Airspace System Resource (NASR).

5. Ensure MVA areas submitted for ROC reductions do not cover large geographical areas that include locations that would not, individually, meet ROC reduction standards. In such cases, **the ATC Products Group** may work with the Service Center and the facility to design a sector that will pass the approval process for a particular approach/departure route.

No Change

**h.** Managers requesting to waive criteria contained in FAA Order 8260.3, must submit FAA Form 8260-1, Flight Procedures/Standards Waiver **in conjunction with the MVA project**. This waiver form will contain the criteria requested to be waived, **with the operational need fully explained**, and examples of how the facility will achieve an equivalent level of safety, if approved. **The package will be sent to the ATC Products Group through the Service Center OSG. Upon completion of the ATC Products Group review, the package will be forwarded** to the Flight Procedure Implementation and Oversight Branch. For the Flight Standards waiver process, facility managers do not need to complete a Safety Management System evaluation. An electronic copy of the completed **waiver** package must be sent to Terminal Safety and Operations Support.

No Change

**n.** Each request must include the SDAT generated Form 7210-9 with the manager's signature and point of contact at the submitting facility. Form 7210-9 must also be an electronic copy with the manager's signature, and imported into the MVA project file. When applicable, each Form 7210-9 must include explanations/justifications for both ROC reduction and AAO additive rounding requests. The MVA request with **Form 7210-9** may be electronically forwarded to the OSG but must be followed with a hard copy with original signatures. However, when the capability of electronic signatures **is** developed within SDAT, **Form 7210-9** will be transmitted electronically between the facility, Service Center, and **ATC Products Group** in lieu of the paper process. SDAT will automatically store the approved MVAC package in the National Airspace System Resource (NASR).

o through r

s. Air traffic managers must ensure that MVACs are reviewed at least annually to ensure chart currency and simplicity. Charts must be revised immediately when changes affecting MVAs occur.

No Change

s. Air traffic managers must ensure that MVACs are **periodically** reviewed **for** chart currency and simplicity **and forwarded for certification to the ATC Products Group at least once every 2 years.** Charts must be revised immediately when changes affecting MVAs occur.

**1. PARAGRAPH NUMBER AND TITLE:** 3-9-5 ESTABLISHING DIVERSE VECTOR AREA/S (DVA)

**2. BACKGROUND:** The DVA is a tool available to radar facilities to allow vectoring or assignment of headings to departing aircraft in lieu of a published departure procedures where obstacles penetrate the departure obstacle clearance surface from a given runway. A DVA is defined as that area, within a RADAR environment, in which a prescribed departure route is not required as the only suitable route to avoid obstacles. It is an area in which random radar vectors or headings below the MVA/MIA established in accordance with the TERPS criteria for diverse departures may be issued. Applying TERPS departure criteria can result in the need to develop specific departure routes, sectors, or areas to avoid obstacles. Facilities need to understand when a DVA is necessary versus other accepted practices for handling departures.

**3. CHANGE:**

**OLD**

**3-9-5 ESTABLISHING DIVERSE VECTOR AREA/S (DVA)**

A DVA area may be established at the request of the air traffic manager and developed jointly with the Technical Operations Service Area Director and the appropriate Service Area Director for any airport within the facility’s area of jurisdiction. When established, reduced separation from obstacles as provided for in TERPS diverse departure criteria will be used to radar vector departing IFR aircraft below the MVA/MIA. When a DVA is established, the air traffic manager shall prepare a facility directive describing:

**NEW**

**3-9-5 ESTABLISHING DIVERSE VECTOR AREA/S (DVA)**

**a. DVAs may be established at the request of the ATM and coordinated jointly with the appropriate Service Area OSG and Terminal Procedures and Charting Group for candidate airports within the facility’s area of jurisdiction. DVAs should be considered when an obstacle(s) penetrates the airport’s diverse departure obstacle clearance surface (OCS). The OCS is a 40:1 surface and is intended to protect the minimum climb gradient. If there are no obstacle penetrations of this surface, then standard takeoff minimums apply, obstacle clearance requirements are satisfied and free vectoring is permitted below the MVA. When the OCS is penetrated, the Terminal Procedures and Charting Group procedural designer will develop an obstacle departure procedure (ODP). An ODP may consist of obstacle notes, non-standard takeoff minimums, a specified departure route, a steeper than normal climb gradient, or any combination thereof. If an ODP is developed for a runway, it is a candidate for a DVA. The ATM should consider whether a DVA is desired and then consider if development would provide operational benefits exceeding existing practices.**

(continued)



**This is done after determining that sufficient radar coverage exists for any given airport with a published instrument approach.** When established, reduced separation from obstacles, as provided for in TERPS diverse departure criteria, will be used to radar vector departing IFR aircraft below the MVA. **To assist in determining if obstacles penetrate the 40:1 surface, ATMs may request the Terminal Procedures and Charting Group provide them with a graphic depiction of any departure penetrations in addition to completing the following steps:**

Add **1. If the location is listed in the Terminal Procedure Publication (TPP) index, check the take-off minimums and (Obstacle) Departure Procedures in section C of the TPP for the DVA runway. If nothing is listed, or only obstacle notes appear, then a DVA is not necessary. If a DP appears, development of a DVA becomes an option.**

Add **2. If the location is not listed, query the NFDC Web site at <http://nfdc.faa.gov>, and select the Special Procedures link to determine if a “special” instrument approach procedure exists at that airport/heliport. If there is a special procedure, the Regional Flight Standards All Weather Office (AWO) can supply FAA Form 8260-15A for ODP information when requested by the facility.**

Add **NOTE-**  
**If the TPP or AWO indicates IFR departures N/A for any given runway, then a DVA is not authorized.**

Add **3. If the ATM elects to request a DVA, use the sample memorandum below as a guide (see FIG 3-9-2). Specify if the request is to establish, modify, or cancel a DVA. If modifying or canceling a DVA, attach the memorandum that authorizes the current DVA. The DVA request must include the following:**

Add **(a) Airport identifier.**

Add **(b) Desired DVA runway(s).**

Add **(c) Requested DVA method. Specify a range of operational headings by starting from the extreme left heading proceeding clockwise (CW) to the extreme right heading as viewed from the departure runway in the direction of departure (for example, Runway 36, 330 CW 030), or isolate a penetrating obstacle(s) by identifying that obstacle(s) either by DOF number or range/bearing from airport.**

- Add **(d) Maximum Extent (Distance) from Departure Runway.**
- Add **(e) Radar Type/Beacon Type. Provide whether the facility has an ASR-9 with Mode S beacon system.**
- Add **(f) Facility Hours of Operation.**

Add

*FIG 3-9-2*  
***Sample DVA Memo***

# Federal Aviation Administration

---

## Memorandum

Date: March 10, 2011

To: John Bickerstaff, Manager, Terminal Procedures and Charting Group, AJV-35  
 THRU: Mark Ward, Manager, Eastern Operations Support Group, AJV-E2

From: Steve Jones, Air Traffic Manager, XYZ TRACON

Prepared by: Joseph B. Specialist, Support Specialist

Subject: Diverse Vector Area (DVA) Request

---

XYZ TRACON requests the following DVA action as specified for the following airport(s) based on the information provided below:

| <b>ACTION</b> | <b>AIRPORT</b> | <b>RWY</b> | <b>REQUESTED DVA METHOD</b>                         | <b>DIST FROM RWY</b> |
|---------------|----------------|------------|---|----------------------|
| ESTABLISH     | KABC           | 35R        | <b>Range of Headings</b><br>320 CW 020              | Within 18NM          |
| ESTABLISH     | KABC           | 17L        | <b>Range of Headings</b><br>140 CW 200              | Within 20NM          |
| MODIFY        | KXYZ           | 15         | <b>Isolate Penetrating Obstacle</b><br>DOF 05-00234 |                      |
| CANCEL        | KDEF           | 22         |   |                      |

Radar Type/Beacon Type: ASR-8 with ATCBI-5

Hours of Operation: 0600-2300 local

POC is Joe Specialist, XYZ TRACON, 416-555-9988.

## Attachments:

1. KXYZ DVA authorization memorandum dated October 28, 2008.
2. KDEF DVA authorization memorandum dated February, 16, 2009.

Add

a. Procedures for radar vectoring IFR departures within 3 miles of obstacles including:

1. Outbound vectoring sectors involving one or more areas.

2. Where required, specific radar routes, depicted on the radar scope, along which positive course guidance is provided to aircraft below the MVA/MIA.

3. Free vectoring areas, in which random vectoring may be accomplished below the MVA/MIA, described in any manner identifiable on the radar scope.

b. No IFR aircraft climbing within a DVA shall be assigned an altitude restriction below the MVA/MIA. Obstacle avoiding vectors may be discontinued when the aircraft reaches the MVA/MIA or leaves the ROC altitude, rounded up to the next 100-foot increment.

c. Headings shall not be assigned beyond those authorized for the DVA prior to reaching the prescribed altitude.

d. If a particular sector or route within a DVA depends on the use of a climb gradient in excess of 200 feet per mile:

1. Unless the procedure is published, this information shall be transmitted to the pilot before departure.

2. Pilot concurrence is required.

**b. Forward DVA requests to the Terminal Procedures and Charting Group through the appropriate Service Area OSG Manager.**

**c. When a DVA is established, it will be documented and provided to the facility by the Terminal Procedures and Charting Group on FAA Form 8260-15D, Diverse Vector Area (DVA). The ATM must then prepare a facility directive describing procedures for radar vectoring IFR departures below the MVA including:**

**1. Textual or graphical description of the limits of each airport's DVA for each runway end.**

**2. Where required, specific radar routes, depicted on the radar display, where radar vectors are provided to aircraft below the MVA.**

**3. Free vectoring areas, in which random vectoring may be accomplished below the MVA.**

**d. IFR aircraft climbing within a DVA must not be assigned an altitude restriction below the MVA. When leaving the confines of the DVA, ensure the aircraft reaches the MVA or has reported leaving the altitude of the obstacle(s) for which the MVA was created, climbing to an altitude at least 1,000 feet above the obstacle.**

**e. Headings must not be assigned beyond those authorized by the DVA prior to reaching the MVA.**

Delete

Delete

Delete

e. DVAs should not be developed that require increased climb gradients unless there is no other suitable means to avoid obstacles except in situations where high volumes of high performance aircraft routinely make accelerated climbs.

Delete

f. Ensure that an air traffic controller is familiar with all the provisions of the facility directive before vectoring aircraft in accordance with DVA criteria.

f. Ensure **all controllers are** familiar with the provisions of the facility directive before vectoring aircraft in accordance with DVA **procedures.**

**1. PARAGRAPH NUMBER AND TITLE:** 4-3-2. APPROPRIATE SUBJECTS

**2. BACKGROUND:** FAA Order JO 7110.65, paragraph 3-7-1 states, “issue by radio or directional light signals specific instructions which approve or disapprove the movement of aircraft, vehicles, equipment or personnel on the movement area.” Currently, there are ATC facilities that either have or desire to create a letter of agreement (LOA) with airport operators that permits access to the movement area without receiving instructions from air traffic control by either radio or directional light signal. It has been noted by Air Traffic Organization-Safety (ATO-S) that there is no provision in paragraph 3-7-1 authorizing this to be accomplished through an LOA. This DCP includes the use of an LOA as a means of authorizing access to a movement area.

**3. CHANGE:**

**OLD**

**NEW**

**4-3-2. APPROPRIATE SUBJECTS**

**4-3-2. APPROPRIATE SUBJECTS**

**Title through d3**

No Change

**e.** Between an ARTCC and an AFSS/FSS: Define areas of security responsibility. (See para 2-7-5, Facility Security.)

**e.** Between an ARTCC and an FSS: Define areas of security responsibility. (See para 2-7-5, Facility Security.)

**f.** Between an ATCT and an AFSS/FSS: Operation of airport lighting.

**f.** Between an ATCT and an FSS: Operation of airport lighting.

**g.** Between an ARTCC or an approach control facility and a nonapproach control tower, an AFSS/FSS, an airport manager, or a local operator: Special VFR Operations. (See FIG 4-3-1.)

**g.** Between an ARTCC or an approach control facility and a nonapproach control tower, an FSS, an airport manager, or a local operator: Special VFR Operations. (See FIG 4-3-1.)

**h through j4**

No Change

**k.** Between a tower and/or AFSS/FSS and an airport manager/aircraft operator at airports upon which the tower and/or AFSS/FSS is located:

**k.** Between a tower and/or FSS and an airport manager/aircraft operator at airports upon which the tower and/or FSS is located:

**1 and 2**

No Change

**3.** Reporting airport conditions.

**3.** Reporting airport conditions, **to include how all PIREP braking action reports of “nil” and “poor” are to be immediately transmitted to the airport operator, and an agreement on actions by air traffic personnel for the immediate cessation of operations on runways subject to “nil” braking action reports.**

Add

REFERENCE-  
Advisory Circular AC 150/5200-30C, Airport Winter Safety and Operations.

4 No Change

Add

**NOTE-**  
*The intent of these LOAs is to use them where airports have standard routes that traverse movement areas on a long term basis. These LOAs are not intended to allow short term operations, single situations, or “open-field” clearances.*

5 No Change

Add

**1. Between a tower and/or FSS and an airport manager/aircraft operator at airports upon which the tower is located but the FSS is not: Reporting airport runway conditions.**

**1. PARAGRAPH NUMBER AND TITLE:** 4-6-4. FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION; and 4-6-5. PREPARATION OF FAA FORM 7230-4

**2. BACKGROUND:** When Comprehensive Electronic Data Analysis and Reporting (CEDAR) is fully deployed, it will provide air traffic management with an electronic means of assessing air traffic employee performance, managing resources, and capturing safety-related information and metrics. The tool will provide a standard interface for the collection, retrieval, and reporting of data from multiple sources. CEDAR will automate the creation, management, and storage of facility activities and events, briefing items, quality assurance reviews, and FAA forms, such as 3120-25, OJT Instruction/Evaluation Report, and 7210-4, Daily Record of Facility Operations. In addition, CEDAR will streamline many functions that managers use to execute their responsibilities as described in FAA Order 7210.3, Facility Operation and Administration; FAA Order 7210.56, Air Traffic Quality Assurance; and FAA Order 3120.4, Air Traffic Technical Training.

**3. CHANGE:**

**OLD**

**4-6-4. FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION**

Add

**a.** Each air traffic facility shall use Form 7230-4, or an approved automated version of the form. Air traffic managers shall decide whether to use one set of forms to describe the entire operation of the facility or individual sets for smaller units of the facility, such as sectors, air-ground positions, telecommunications positions, etc. An example of the Daily Record of Facility Operation follows this section. (See FIG 4-6-1.)

Add

**NEW**

**4-6-4. FAA FORM 7230-4, DAILY RECORD OF FACILITY OPERATION**

**a. Completion of FAA Form 7230-4, Daily Record of Operation. Using agency-approved automation methods to complete FAA Form 7230-4 is preferred to using manual methods.**

**1. Each air traffic facility must use the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230-4.**

**2. Where currently in use, facilities and/or TMUs may continue to use the NTML to complete an automated version of the FAA Form 7230-4.**

Add

**NOTE-**

**A National Workgroup has been established to develop methods to exchange pertinent data between CEDAR and NTML that is needed to complete FAA Form 7230-4. This method will enable a single method of completing an automated version of the FAA Form 7230-4 while maintaining the unique program functionality capability of both CEDAR/NTML programs.**

Add

**3. If an automated method is not available to complete FAA form 7230-4, the facility and or traffic management unit must manually complete the form. An example of the Daily Record of Facility Operation follows this section. (See FIG 4-6-1.)**

**b. Use of an automated version of Form 7230-4 must be approved by the appropriate Service Area office prior to the form being used by the facility.**

Delete

**c**

Renumber **b**

**OLD**

**NEW**

**4-6-5. PREPARATION OF FAA FORM 7230-4**

**4-6-5. PREPARATION OF FAA FORM 7230-4**

**Title through g*****NOTE-***

No Change

**h. FAAQ 7210.56, Air Traffic Quality Assurance, defines situations requiring a Quality Assurance Review (QAR) and the procedures to be followed to accomplish the review. Promptly notify personnel responsible for conducting the review upon identifying the need for a QAR. Record QARs with the minimum detail necessary in order to identify the initiating incident (e.g., unusual go-around) and how it was identified (e.g., in-flight evaluation). Facilities may establish local forms and procedures for recording, disseminating and documenting the resolution of QARs. Local forms used for recording this information are considered supplements to FAA Form 7230-4 and shall be filed with it.**

**h. FAA Order 7210.56, Air Traffic Quality Assurance, defines situations requiring a Quality Assurance Review (QAR) and the procedures to be followed to accomplish the review. Promptly notify personnel responsible for conducting the review upon identifying the need for a QAR. Record QARs with the minimum detail necessary in order to identify the initiating incident (**for example**, unusual go-around, 3-hour tarmac delay) and how it was identified (**for example**, in-flight evaluation).**

Add

**1. En Route and Oceanic facilities must use the CEDAR tool to record and disseminate QARs. En Route and Oceanic facilities must also use CEDAR to document the resolutions of QARs.**

Add

**2. Terminal facilities may establish local forms and procedures for recording, disseminating, and documenting the resolution of QARs. Local forms used for recording this information are considered supplements to FAA Form 7230-4 and must be filed with it.**

**1. PARAGRAPH NUMBER AND TITLE:** 10-3-10. MULTIPLE RUNWAY CROSSINGS

**2. BACKGROUND:** The FAA Runway Safety Call to Action Committee issued several recommendations to address improving runway safety across the NAS. In response to the committee’s recommendations, the Air Traffic Organization convened a Safety Risk Management Panel to evaluate the safety of the committee recommendations.

**3. CHANGE:**

**OLD**

Add  
Add

**NEW**

**10-3-10. MULTIPLE RUNWAY CROSSINGS**

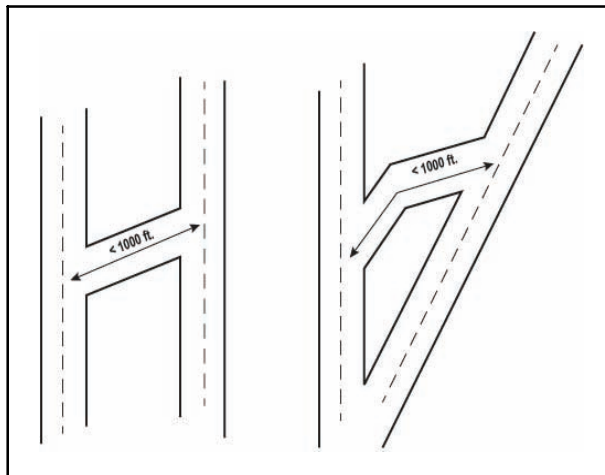
**a. Air traffic managers at airports where the taxi route between runway centerlines is less than 1,000 feet must submit a request to the appropriate Terminal Services Director of Operations for approval before authorizing multiple runway crossings.**

Add

**REFERENCE-**  
**FAAO JO 7110.65, Para 3-7-2, Taxi and Ground Movement Operations**

Add

**FIG 10-3-1**  
**Multiple Runway Crossings**



Add

**b. The request must address the specific locations where multiple runway crossings will be authorized. This must only include locations where the intervening taxi route is less than 1,000 feet between runway centerlines.**

Add

**c. Facilities must keep a copy of the approval correspondence issued by the Terminal Services Director of Operations.**



Add

**d. Facility directives must include a diagram that depicts the runway/taxiway intersections where multiple runway crossings are authorized.**

Add

**e. The Terminal Services Director of Operations must ensure that an annual review of multiple runway crossing operations is conducted for those facilities employing this operation. The results of this review must be sent to the Terminal Safety and Operations Support Office by September of each year.**

**1. PARAGRAPH NUMBER AND TITLE:** 10-6-9. RUNWAY EDGE LIGHTS ASSOCIATED WITH MEDIUM APPROACH LIGHT SYSTEM/RUNWAY ALIGNMENT INDICATOR LIGHTS

**2. BACKGROUND:** The Three Step MALS/Three Step RAIL Intensity Settings, as depicted in TBL 10-6-1, do not comply with FAA Order 6850.2A, Visual Guidance Lighting Systems, Chapter 2, Paragraph 210, Table 2-3 Brightness Steps.

**3. CHANGE:**

**OLD**

**NEW**

Title through paragraph

No Change

**OLD**

*FIG 10-6-1*  
**MALSR Step Intensity Settings**

| <i>Runway Edge Lights</i> |             | <i>Two Step MALS/One Step RAIL</i> |             | <i>Three Step MALS/Three Step RAIL</i> |                       |
|---------------------------|-------------|------------------------------------|-------------|--|-----------------------|
| <i>Intensity</i>          |             | <i>Intensity</i>                   |             | <i>Intensity</i>                       |                       |
| <i>HIRL</i>               | <i>MIRL</i> | <i>MALS</i>                        | <i>RAIL</i> | <i>MALS</i>                            | <i>RAIL</i>           |
| Step 5                    | Step 3      | 100%                               | 100%        | 100%                                   | 100%                  |
| Step 4                    |             |                                    | 100%        | 100%                                   | 100%                  |
| Step 3                    | Step 2      | 10%                                | OFF         | 20%                                    | 26% outer<br>8% inner |
| Step 2                    |             |                                    | OFF         | <u>OFF</u>                             | <u>4%</u>             |
| Step 1                    | Step 1      | OFF                                | OFF         | 4%                                     | 1%                    |

**NEW**

*FIG 10-6-1*  
**MALSR Step Intensity Settings**

| <i>Runway Edge Lights</i> |             | <i>Two Step MALS/One Step RAIL</i> |             | <i>Three Step MALS/Three Step RAIL</i> |             |
|---------------------------|-------------|------------------------------------|-------------|--|-------------|
| <i>Intensity</i>          |             | <i>Intensity</i>                   |             | <i>Intensity</i>                       |             |
| <i>HIRL</i>               | <i>MIRL</i> | <i>MALS</i>                        | <i>RAIL</i> | <i>MALS</i>                            | <i>RAIL</i> |
| Step 5                    | Step 3      | 100%                               | 100%        | 100%                                   | 100%        |
| Step 4                    |             |                                    | 100%        | 100%                                   | 100%        |

|        |        |     |     |               |                       |
|--------|--------|-----|-----|---------------|-----------------------|
| Step 3 | Step 2 | 10% | OFF | 20%           | 26% outer<br>8% inner |
| Step 2 |        |     | OFF | <del>4%</del> | <del>1%</del>         |
| Step 1 | Step 1 | OFF | OFF | 4%            | 1%                    |

**1. PARAGRAPH NUMBER AND TITLE:** 17-20-3. DEFINITION

**2. BACKGROUND:** Navigational capabilities are much more advanced today than when the NAS was originally designed. Today, many aircraft take advantage of more efficient and cost-effective routes by applying various forms of RNAV capability. Departure Procedures (DPs) and Standard Terminal Arrivals (STARs) also add to a more efficient use of the NAS.

**3. CHANGE:**

**OLD**

**17-20-3. DEFINITION**

The National Playbook is a traffic management tool developed to give the ATCSCC, other FAA facilities, and customers a common product for various route scenarios. The purpose of the National Playbook is to aid in expediting route coordination during those periods of constraint on the NAS. The National Playbook contains common scenarios that occur during each severe weather season and each includes the resource or flow impacted, facilities included, and specific routes for each facility involved. The playbooks are validated by the individual facilities involved in that scenario. The National Playbook is available on the ATCSCC Web site at <http://www.atcsc.faa.gov/Operations/operations.html>.

**NEW**

**17-20-3. DEFINITION**

The National Playbook is a traffic management tool developed to give the ATCSCC, other FAA facilities, and customers a common product for various route scenarios. The purpose of the National Playbook is to aid in expediting route coordination during those periods of constraint on the NAS. The National Playbook contains common scenarios that occur during each severe weather season, and each includes the resource or flow impacted, facilities included, and specific routes for each facility involved. **These routes may include any combination of the following NAS elements: Navigation Reference System (NRS) waypoints, RNAV waypoints, RNAV fixes, NAVAIDS, DPs, and STARs.** The playbooks are validated by the individual facilities involved in that scenario. The National Playbook is available on the ATCSCC Web site at <http://www.atcsc.faa.gov/Operations/operations.html>.

**1. PARAGRAPH NUMBER AND TITLE:** 20-3-3. AIR TRAFFIC SECURITY LIAISON (ATSL)

**2. BACKGROUND:** The reorganization of AJR-24 eliminated the ATSL position. The Air Traffic Security Coordinators (ATSCs) have picked up the old ATSL responsibilities. ATSC responsibilities are identified in the 7610.4. Since the ATSL is no longer a valid position, the reference to this position is being removed from the order.

**3. CHANGE:**

**OLD**

**20-3-3. AIR TRAFFIC SECURITY LIAISON (ATSL)**

**NEW**

Delete

a. ATSLs, under the supervision of the ADLO or ATSC as appropriate and System Operations Security, may be assigned to NORAD Headquarters and CONR-Air Operations Center (AOC.)

Delete

b. The ATSL primary duty is to Monitor Domestic Events Network (DEN) and serve as a liaison between the FAA and NORAD Headquarters/CONR-AOC, as appropriate. ATSLs will operate as a member of the operational battle staff to which assigned.

Delete

**1. PARAGRAPH NUMBER AND TITLE:** 20-4-2. PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED VIP MOVEMENT; and 20-4-3. SPECIAL INTEREST FLIGHTS (SIFs)

**2. BACKGROUND:** System Operations Security has reorganized and the System Operations Support Center (SOSC) now falls under Tactical Operations Security.

**3. CHANGE:**

**OLD**

**20-4-2. PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED VIP MOVEMENT**

**a.** Strategic Operations Security, System Operations Support Center (SOSC), (202) 267-8276, is responsible for the coordination, planning, and timely communication of POTUS, VPOTUS, FLOTUS, or USSS supported VIP movements and associated security measures.

**NEW**

**20-4-2. PRESIDENTIAL/UNITED STATES SECRET SERVICE (USSS) SUPPORTED VIP MOVEMENT**

**a.** Tactical Operations Security, System Operations Support Center (SOSC), (202) 267-8276, is responsible for the coordination, planning, and timely communication of POTUS, VPOTUS, FLOTUS, or USSS supported VIP movements and associated security measures.

**OLD**

**20-4-3. SPECIAL INTEREST FLIGHTS (SIFS)**

**Title through a**

**b.** Strategic Operations Security, System Operations Support Center, 202-267-8276, is responsible for advanced coordination regarding special interest flights from State Department designated special interest countries known to the Agency.

**NEW**

**20-4-3. SPECIAL INTEREST FLIGHTS (SIFS)**

No Change

**b.** Tactical Operations Security, System Operations Support Center, 202-267-8276, is responsible for advanced coordination regarding special interest flights from State Department designated special interest countries known to the Agency.

