

**CHANGE**

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

**Air Traffic Organization Policy**

**JO 7210.3CC  
CHG 1**

**Effective Date:**  
December 2, 2021

**SUBJ:** Facility Operation and Administration

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- 1. Purpose of This Change.** This change transmits revised pages to Federal Aviation Administration Order JO 7210.3CC, 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 website 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 Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.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.

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# Explanation of Changes

## Change 1

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

**a. 1-2-4. ABBREVIATIONS**  
**2-1-6. CHECKING ACCURACY OF  
PUBLISHED DATA**  
**3-1-1. BASIC EQUIPMENT**  
**6-3-4. FLIGHT DATA UNIT**  
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**6-10-2. REQUIREMENTS**  
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**19-1-9. EXAMPLE OF SPECIAL  
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**20-1-5. TFR NOTAM CONTENT**  
**21-2-2. TACTICAL OPERATIONS**  
**SECURITY GROUP RESPONSIBILITIES**  
**Appendix 6. Commercial Space LOA**  
**Sample Templates**

This editorial change complies with the Federal Women's Program (FWP) suggestions. The acronym NOTAM is updated from Notice to Airmen to the more applicable term Notice to Air Missions, which is inclusive of all aviators and missions.

**b. 2-1-5. RELEASE OF INFORMATION**  
**2-1-9. HANDLING BOMB THREAT  
INCIDENTS**  
**2-1-23. FACILITY IDENTIFICATION**  
**2-2-4. DUTY FAMILIARIZATION AND  
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**3-4-1. USE OF RECORDERS**  
**3-4-3. CHECKING AND CHANGING  
RECORDING EQUIPMENT**  
**4-3-2. APPROPRIATE SUBJECTS**

**7-2-2. AMPLITRON OR PARAMETRIC  
AMPLIFIER FAILURE**

The purpose of the change is to ensure that FAA Order JO 7210.3 accurately reflects what is done in Flight Service (AJR-B) facilities today. These changes remove services that are no longer provided, amend procedures that have changed with emerging technologies, and clarify procedures based on comments from users. Additionally, the changes provide guidance for Federal Contract Flight Service Stations (FCFSS) and indicate—where applicable—that some procedures apply to Alaska only.

**c. 2-1-7. AIR TRAFFIC SERVICE DURING  
PLANNED AND UNPLANNED OUTAGES**

This change amends FAA Order JO 7210.3, paragraph 2-1-7, Air Traffic Service During Planned and Unplanned Outages, and updates it with the Project Risk Plan (PRP) and the Operational Risk Management Plan (ORMP) processes which are based on Federal Aviation Administration (FAA) Air Traffic Operational Risk Management (ORM) Principles.

**d. 2-1-32. REPORTING UNAUTHORIZED,  
HAZARDOUS, OR SUSPICIOUS UAS  
ACTIVITIES**

**2-1-33. USE OF UAS DETECTION  
SYSTEMS**

**2-1-34. USE OF COUNTER UNMANNED  
AIRCRAFT SYSTEMS (C-UAS)**

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

This change renames paragraph 2-1-32 to Reporting Suspicious UAS Activities, and requires ATC facilities to create a checklist for reporting suspicious UAS activity. In addition, the change adds two new paragraphs regarding the use of UAS Detection Systems, Counter Unmanned Aircraft Systems (C-UAS) and adds UAS activity of operational importance to paragraph 2-2-4 as a position relief

checklist item. This change cancels and incorporates N JO 7210.931, which was effective May 21<sup>st</sup>, 2021.

**e. 2-6-14. WORK ASSIGNMENTS AFTER  
SUSPENSION OR TERMINATION OF  
TRAINING**

This change removes paragraph 2-6-14 from FAA Order JO 7210.3, Facility Operation and Administration. It also cancels and incorporates N JO 7210.934, which was effective October 13, 2021.

**f. 3-6-3. ATC RADAR BEACON SYSTEM  
DECODER CONTROL BOX CHECKS**

This change deletes JO 7210.3, paragraph 3-6-3, ATC Radar Beacon System Decoder Control Box Checks, and renumbers the remaining paragraphs in Chapter 3, Section 6.

**g. 3-8-5. ESTABLISHING DIVERSE  
VECTOR AREA/S (DVA)**

**10-3-15. GO-AROUND/MISSED  
APPROACH**

This change reformats the excessively long first subparagraph in paragraph 3-8-5 to improve readability. It restricts all future Diverse Vector Area (DVA) development to ATCT locations without published standard instrument departures (SIDs). It also removes all content governing the handling of go-arounds and missed approaches from paragraph 3-8-5, Establishing Diverse Vector Area (DVA/s). New facility directive requirements concerning vectoring of aircraft during a go-around or missed approach are now incorporated into paragraph 10-3-15, Go-Around/Missed Approach. These requirements will include authorized headings or ranges of headings to be used when conducting these procedures, and evaluated by the Flight Procedures Team, if newly designated or when changes are made. Facilities are also required to display on the video map any prominent obstacles which influenced the determination of these headings. This change also removes mention of free vectoring and free vectoring areas.

**h. 4-3-1. LETTERS OF AGREEMENT  
19-1-2. POLICY  
19-1-3. RESPONSIBILITIES**

This change adds a requirement for facility management to follow the guidance contained in Chapter 19 of this order before negotiating a Letter of Agreement (LOA) concerning recurring Class A authorizations that require a waiver, authorization or exemption for

which air traffic does not have issuing authority. It also revises the office names appearing in Chapter 19 and adds an additional 14 CFR Part 91 regulation missing from the Flight Standards section of responsibilities. This change cancels and incorporates N JO 7210.932, which was effective July 1<sup>st</sup>, 2021.

**i. 4-3-2. APPROPRIATE SUBJECTS  
5-5-2. OPERATIONS  
19-6-1. GENERAL**

This change adds the policy for evaluating, approving, and denying requests for authorizations regarding UAS operations on or near airports. This change cancels and incorporates N JO 7210.933, which was effective September 6th, 2021.

**j. 12-4-1. POLICY**

This change revises helicopter route chart publication cycles with other visual chart products on a 56-day basis.

**k. 14-1-1. OPERATING POSITION  
DESIGNATORS**

**14-2-1. RESPONSIBILITY  
14-2-3. POSITIONS/SERVICES  
14-3-3. AIRPORT SEARCH**

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**17-5-3. MESSAGE TRAFFIC NUMBER**

**RECORD**

**17-5-4. UNANNOUNCED MILITARY**

**AIRCRAFT ARRIVALS**

**20-1-6. TFR INFORMATION**

The purpose of the change is to ensure that FAA Order JO 7210.3 accurately reflects what is done in Flight Service facilities today. These changes remove services that are no longer provided, amend procedures that have changed with emerging technologies, and clarify procedures based on comments from users. Additionally, the changes provide guidance for Federal Contract Flight Service Stations (FCFSS) and indicate—where applicable—that some procedures apply to Alaska only.

#### **l. Editorials**

Editorial changes include the addition of adapted arrival route (AAR), adapted departure route (ADR), adapted departure and arrival route (ADAR), and embedded route text (ERT) to the abbreviations table in paragraph 1-2-4, as well as the deletion of Bigelow Aerospace Advanced Space Studies (BAASS). In paragraph 4-3-6 and Appendix 6, Space Operations at ATCSCC was changed to ATO Space Operations. Out of date information regarding alternate back-up bridge phone numbers for the DEN

was deleted in paragraphs 2-1-33, 2-7-7, 21-4-1, and 21-4-2. The term acceptance rate was replaced with arrival rate throughout the order. Two instances of the User Request Evaluation Tool (URET) were removed from the index. Finally, the Flight Services Operations Area Office was changed to Flight Service Safety and Operations Group in paragraphs 1-2-1, 2-1-1, 2-1-5, 14-1-3, and 17-5-2, and abbreviations for Federal Contract Flight Service Station (FCFSS) and Designated Lead Specialist (DLS) were added to TBL 1-2-1 while International Flight Service Station (IFSS) was deleted from TBL 1-2-1. Also, editorial changes supplementing those listed above in b., changing the name of Flight Services Operations Area Office to Flight Service Safety and Operations Group, were made throughout the publication.

#### **m. Entire Publication**

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



## PAGE CONTROL CHART

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# Part 1. BASIC

## Chapter 1. General

### Section 1. Introduction

#### 1-1-1. PURPOSE OF THIS ORDER

This order provides instructions, standards, and guidance for operating and managing air traffic facilities.

a. Part 1 contains information generally applicable to two or more options.

b. Part 2, Part 3, and Part 4 prescribe instructions unique to each discipline:

1. Air Route Traffic Control Centers (ARTCC).
2. Terminal Air Traffic Control Facilities.
3. Flight Service Stations.

c. Part 5 prescribes the instructions for traffic management applicable to the David J. Hurley Air Traffic Control System Command Center (ATCSCC), center, and terminal facilities.

d. Part 6 is regulatory information concerning waivers, authorizations, exemptions, and flight restrictions.

e. Part 7 provides the overview concerning System Operations Security, Strategic and Tactical Operations, which are further delineated in FAA Order JO 7610.4, Special Operations. Part 7 explains Air Traffic's role in the security realm, military activities, and other events which have impact on facilities and the NAS.

#### 1-1-2. AUDIENCE

This order applies to all ATO personnel and anyone using ATO directives.

#### 1-1-3. WHERE TO FIND THIS ORDER

This order is available on the FAA website 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/).

#### 1-1-4. WHAT THIS ORDER CANCELS

FAA Order JO 7210.3BB, Facility Operation and Administration, dated August 15, 2019, and all changes to it are canceled.

#### 1-1-5. EXPLANATION OF CHANGES

The significant changes to this order are identified in the Explanation of Changes page(s). It is advisable to retain the page(s) throughout the duration of the basic order.

#### 1-1-6. EFFECTIVE DATES AND SUBMISSIONS FOR CHANGES

a. This order and its changes are scheduled to be published to coincide with AIRAC dates.

b. The "Cutoff Date for Completion" in the table below refers to the deadline for a proposed change to be fully coordinated and signed. Change initiators must submit their proposed changes well in advance of this cutoff date to meet the publication effective date. The process to review and coordinate changes often takes several months after the change is initially submitted.

*TBL 1-1-1*  
**Publication Schedule**

Basic or Change	Cutoff Date for Completion	Effective Date of Publication
JO 7210.3CC	12/31/20	6/17/21
Change 1	6/17/21	12/2/21
Change 2	12/2/21	5/19/22
Change 3	5/19/22	11/3/22
JO 7210.3DD	11/3/22	4/20/23
Change 1	4/20/23	10/5/23
Change 2	10/5/23	3/21/24
Change 3	3/21/24	9/5/24

### 1-1-7. DELIVERY DATES

If an FAA facility **has not** received the order/changes at least 30 days before the above effective dates, the facility must notify its service area office distribution officer.

### 1-1-8. RECOMMENDATIONS FOR PROCEDURAL CHANGES

The responsibility associated with processing and coordinating revisions to this order is delegated to the Director, Policy, AJV-P.

**a.** Personnel should submit recommended changes in procedures to facility management.

**b.** Recommendations from other sources should be submitted through appropriate FAA, military, or industry/user channels.

**c.** Proposed changes must be submitted electronically to 9-AJV-P-HQ-Correspondence@faa.gov. The submission should include a description of the recommended change, and the proposed language to be used in the order.

#### **NOTE-**

*For details on the submission process as well as additional AJV-P processing responsibilities, please see FAA Order JO 7000.5, Procedures for Submitting Changes to Air Traffic Control Publications.*

**d.** Procedural changes will not be made to this order until the operational system software has been adapted to accomplish the revised procedures.

### 1-1-9. CONSTRAINTS GOVERNING SUPPLEMENTS AND PROCEDURAL DEVIATIONS

**a.** Exceptional or unusual requirements may dictate procedural deviations or supplementary procedures to this order. The written approval of the Vice President of System Operations Services must be obtained prior to issuing a supplemental or procedural deviation to this order which decreases the level, quality, or degree of service required by this order.

**b.** Prior approval by the following appropriate military headquarters is required for subsequent interface with the Federal Aviation Administration

(FAA) if military operations or facilities are involved. (See TBL 1-1-2.)

**TBL 1-1-2**  
**Military Headquarters**

Branch	Address
U.S. Air Force	HQ AFFSA/A3A 7919 Mid-America Blvd Suite 300 Oklahoma City, OK 73135
U.S. Army	Director USAASA (MOAS-AS) 9325 Gunston Road Suite N-319 Ft. Belvoir, VA 22060-5582
U.S. Navy	Department of the Navy Chief of Naval Operations (N885F) 2000 Navy Pentagon Washington, DC 20350-2000

### 1-1-10. SAFETY MANAGEMENT SYSTEM (SMS)

Every employee is responsible to ensure the safety of equipment and procedures used in the provision of services within the National Airspace System (NAS). Risk assessment techniques and mitigations, as appropriate, are intended for implementation of any planned safety significant changes within the NAS, as directed by FAA Order 1100.161, Air Traffic Safety Oversight. Direction regarding the Safety Management System (SMS) and its application can be found in the FAA Safety Management System Manual and FAA Order 1100.161. The Safety Management System will be implemented through a period of transitional activities. (Additional information pertaining to these requirements and processes can be obtained by contacting the service area offices.)

### 1-1-11. REFERENCES TO FAA NON-AIR TRAFFIC ORGANIZATION

When references are made to regional office organizations that are not part of the ATO (i.e., Communications Center, Flight Standards, Airport offices, etc.), the facility should contact the FAA region where the facility is physically located – not the region where the facility's Service Area office is located.

## Section 2. Order Use

### 1-2-1. POLICY

This order prescribes information necessary to effectively operate and administer air traffic service facilities. When a conflict arises between its provisions and those in other agency issuances, supervisors must request clarification from their respective En Route and Oceanic Operations Area, Terminal Operations Area, or Flight Service Safety and Operations Group. In the event a conflict arises between instructions in this order and the terms of a labor union contract, supervisors must abide by the contract.

### 1-2-2. ANNOTATIONS

Revised, new, or reprinted pages will be marked as follows:

- a. The change number and the effective date are printed on each revised or additional page.
- b. A reprinted page not requiring a change is reprinted in its original form.
- c. Bold vertical lines in the margin of the text mark the location of substantive procedural, operational, or policy changes; e.g., when material affecting the performance of duty is added, revised, or deleted.
- d. Statements of fact of a prefatory or explanatory nature relating to directive material are set forth as notes.
- e. If a facility has not received the order/changes at least 30 days before the above effective dates, the facility must notify its service area office distribution officer.

### 1-2-3. WORD MEANINGS

As used in this order:

- a. “Shall” or “must” means a procedure is mandatory.
- b. “Should” means a procedure is recommended.
- c. “May” and “need not” mean a procedure is optional.
- d. “Will” indicates futurity, not a requirement for application of a procedure.

e. “Shall not” or “must not” means a procedure is prohibited.

f. Singular words include the plural, and plural words include the singular.

### 1-2-4. ABBREVIATIONS

As used in this order, the following abbreviations have the meanings indicated: (See TBL 1-2-1.)

*TBL 1-2-1*  
**Abbreviations**

Abbreviation	Meaning
AAR . . . . .	Adapted arrival route
AAR . . . . .	Airport arrival rate
ACDO . . . . .	Air Carrier District Office
ACE-IDS . . . . .	ASOS Controller Equipment-Information Display System
ACID . . . . .	Aircraft identification
ADAR . . . . .	Adapted departure arrival route
ADC . . . . .	Aerospace Defense Command
ADIZ . . . . .	Air defense identification zone
ADL . . . . .	Aggregate demand list
ADR . . . . .	Adapted departure route
ADR . . . . .	Airport departure rate
ADS-A . . . . .	Automatic Dependant Surveillance-Addressable
ADS-B . . . . .	Automatic Dependent Surveillance-Broadcast
AFP . . . . .	Airspace Flow Program
AFRES . . . . .	Air Force reserve
AFTN . . . . .	Aeronautical fixed telecommunications network
AIDC . . . . .	ATS Interfacility Data Communications
AIM . . . . .	Aeronautical Information Manual
AIRAC . . . . .	Aeronautical Information Regulation and Control
AIS . . . . .	Aeronautical Information Services
AIT . . . . .	Automated information transfer
ALD . . . . .	Available landing distance
ALS . . . . .	Approach light system
ALTRV . . . . .	Altitude reservation
AMASS . . . . .	Airport Movement Area Safety System
APREQ . . . . .	Approval request
ARAC . . . . .	Army Radar Approach Control facility (US Army)
ARFF . . . . .	Airport rescue and fire fighting
ARINC . . . . .	Aeronautical Radio, Inc.
ARO . . . . .	Airport Reservations Office

Abbreviation	Meaning
ARP .....	Airport reference point
ARSR .....	Air route surveillance radar
ART .....	ATO Resource Tool
ARTCC .....	Air route traffic control center
ASDE .....	Airport surface detection equipment
ASDE-X .....	Airport Surface Detection Equipment System – Model X
ASF .....	Airport stream filters
ASI .....	Altimeter setting indicator
ASOS .....	Automated Surface Observing System
ASP .....	Arrival sequencing program
ASPM .....	Aviation System Performance Metrics
ASR .....	Airport surveillance radar
ASSC .....	Airport Surface Surveillance Capability
AT .....	Air Traffic
ATA .....	Air traffic assistant
ATC .....	Air traffic control
ATCAA .....	Air traffic control assigned airspace
ATCRBS .....	Air traffic control radar beacon system
ATCS .....	Air traffic control specialist
ATCSCC .....	David J. Hurley Air Traffic Control System Command Center
ATCT .....	Airport traffic control tower
ATIS .....	Automatic terminal information service
ATM .....	Air Traffic Manager
ATO .....	Air Traffic Organization
ATOP .....	Advanced Technologies and Oceanic Procedures
ATPB .....	Air Traffic Procedures Bulletin
ATREP .....	Air Traffic representative
AWC .....	Aviation Weather Center
AWIS .....	Automated weather information service
AWOS .....	Automated Weather Observing System
CA .....	Conflict alert
CAP .....	Civil Air Patrol
CARF .....	Central Altitude Reservation Function
CAS .....	Civil Aviation Security
CCFP .....	Collaborative Convective Forecast Product
CCSD .....	Collaborative Constraint Situation Display
CD .....	Clearance delivery
CDM .....	Collaborative decision making
CDR .....	Coded Departure Route(s)
CDR .....	Continuous Data Recording
CERAP .....	Combined Center/RAPCON
CFR .....	Code of Federal Regulations
CIC .....	Controller-in-charge
CIRNOT .....	Circuit Notice
COB .....	Close of business

Abbreviation	Meaning
CONUS .....	Continental/Contiguous/Conterminous United States
COO .....	Chief Operating Officer
COTC .....	Computer operator terminal console
CPDLC .....	Controller Pilot Data Link Communications
CTRD .....	Certified Tower Radar Display
CTA .....	Controlled times of arrival
CWA .....	Center weather advisory
CWSU .....	ARTCC Weather Service Unit
DAS .....	Delay assignment
DASI .....	Digital altimeter setting indicator
DCCWU .....	ATCSCC Weather Unit
DEDS .....	Data entry display system
DLS .....	Designated Lead Specialist
DME .....	Distance measuring equipment
DOD .....	Department of Defense
DOE .....	Department of Energy
DOT .....	Department of Transportation
DP .....	Instrument Departure Procedure
DRT .....	Diversion Recovery Tool
DSP .....	Departure sequencing program
DTM .....	Digital terrain maps
DVA .....	Diverse vector area
DVRSN .....	Diversion
E-MSAW .....	En Route Minimum Safe Altitude Warning
EASL .....	Existing automation service level
EBUS .....	Enhanced Backup Surveillance System
EDCT .....	Expect departure clearance time
EDST .....	En Route Decision Support Tool
EI .....	Early Intent
ELT .....	Emergency locator transmitter
EOVM .....	Emergency obstruction video map
EOSH .....	Environmental and Occupational Safety and Health
EPIC .....	El Paso Intelligence Center
ERIDS .....	En Route Information Display System
ERT .....	Embedded route text
ESL .....	Emergency service level
ESP .....	En Route sequencing program
FAA .....	Federal Aviation Administration
FCA .....	Flow Constrained Area
FCFSS .....	Federal Contract Flight Service Station
FDEP .....	Flight data entry and printout
FDIO .....	Flight data input/output
FEA .....	Flow Evaluation Area
FICO .....	Flight Inspection Central Operations
FOIA .....	Freedom of Information Act
FOUO .....	For Official Use Only
FP .....	Flight plan

Abbreviation	Meaning
FPL .....	Full performance level
FRD .....	Fixed Radial Distance
FSA .....	Flight schedule analyzer
FSDO .....	Flight Standards district office
FSL .....	Full service level
FSM .....	Flight Schedule Monitor
FSS .....	Flight service station
GA .....	General aviation
GC .....	Ground control
GDP .....	Ground delay program(s)
GENOT .....	General notice
GI .....	General information message
GS .....	Ground stop(s)
HIRL .....	High intensity runway lights
HRPM .....	Human Resource Policy Manual
IAFDOF .....	Inappropriate Altitude for Direction of Flight
ICAO .....	International Civil Aviation Organization
ICR .....	Integrated Collaborative Rerouting
ICSS .....	Integrated communication center
IDS .....	Information Display System
IFR .....	Instrument flight rules
ILS .....	Instrument landing system
INS .....	Immigration and Naturalization Service
IR .....	IFR MTR
ITWS .....	Integrated Terminal Weather System
LAA .....	Local airport advisory
LAANC .....	Low Altitude Authorization Notification Capability
LAAS .....	Low altitude alert system
LADP .....	Local Airport Deicing Plan
LAHSO .....	Land and hold short operations
LAWRS .....	Limited aviation weather reporting station
LC .....	Local control
LLWAS .....	Low level wind shear alert system
LLWAS NE .....	Low Level Wind Shear Alert System Network Expansion
LLWAS-RS .....	Low Level Wind Shear Alert System Relocation/Sustainment
LLWS .....	Low Level Wind Shear
LOA .....	Letter of agreement
LOGT .....	Log/tally print time
LSAS .....	Leased Service A System
MA .....	Monitor alert
MALS/RAIL .....	Medium approach light system and runway alignment indicator lights
MAPPS .....	Management Association for Private Photogrammetric Surveyors
MCI .....	Mode C intruder
MDM .....	Main display monitor

Abbreviation	Meaning
MEA .....	Minimum en route IFR altitude
MEARTS .....	Micro En Route Automated Radar Tracking System
METAR .....	Aviation Routine Weather Report
MIA .....	Minimum IFR altitude
MIAWS .....	Medium Intensity Airport Weather System
MIT .....	Miles-in-trail
MOA .....	Military operations area
MOCA .....	Minimum obstruction clearance altitude
MOR .....	Mandatory Occurrence Report
MOU .....	Memorandum of understanding
MSL .....	Mean sea level
MTI .....	Moving target indicator
MTR .....	Military training route
MVA .....	Minimum vectoring altitude
NAA .....	National aeronautical association
NADIN .....	National airspace data interchange network
NAR .....	National Automation Request
NAR .....	North American Routes
NAS .....	National Airspace System
NASA .....	National Aeronautics and Space Administration
NASE .....	National Airway Systems Engineering
NAVAID .....	Navigational aid
NCIC .....	National crime information center
NFDD .....	National Flight Data Digest
NHOP .....	National hurricane operations plan
NM .....	Nautical mile
NNCC .....	National Network Control Center
NOAA .....	National Oceanic and Atmospheric Administration
NOM .....	National Operations Manager
NORAD .....	North American Aerospace Defense Command
NOS .....	National Ocean Service
NOTAM .....	Notice to Air Missions
NRP .....	North American Route Program
NTML .....	National Traffic Management Log
NTMO .....	National Traffic Management Officer
NTSB .....	National Transportation Safety Board
NWS .....	National Weather Service
NWSOP .....	National winter storm operations plan
OASIS .....	Operational and Supportability Implementation System
OM .....	Operations Manager
OPR .....	Office of primary responsibility
OS .....	Operations Supervisor
OSIC .....	Operations Supervisor-in-Charge
P-ACP .....	Prearranged coordination procedures

Abbreviation	Meaning
PAR .....	Precision approach radar
PB .....	Pilot briefing
PCS .....	Power Conditioning System
PDC .....	Pre-Departure Clearance
PIC .....	Pilot-in-command
PIREPS .....	Pilot reports
POC .....	Point of Contact
PVD .....	Planned view display
RA .....	Radar Associate
RAA .....	Remote Airport Advisory
RADLO .....	Regional air defense liaison officer
RAIL .....	Runway alignment indicator lights
RAIS .....	Remote Airport Information Service
RAPCON .....	Radar Approach Control facility (USAF, USN and USMC)
RATCF .....	Radar Air Traffic Control Facility (USN and USMC)
RCAG .....	Remote communications air ground facility
RCC .....	Rescue coordination center
RMT .....	Route Management Tool
ROC .....	Regional operations center
ROG .....	Route Options Generation
ROT .....	Runway occupancy time
RSU .....	Runway supervisory unit
RVR .....	Runway visual range
SAA .....	Special activity airspace
SAMS .....	Special Use Airspace Management System
SATCOM .....	Satellite Communication(s)
SAWS .....	Stand Alone Weather System
SDP .....	Surveillance Data Processing
SE .....	Systems engineer
SECM .....	Safety and Environmental Compliance Manager
SGI .....	Special Government Interest
SIA .....	Status information area
SID .....	Standard Instrument Departure
SIGMET .....	Significant meteorological information
SMGCS .....	Surface movement guidance and control system
SMIS .....	Safety Management Information System
SMO .....	System Management Office
SMR .....	Surface Movement Radar
SOP .....	Standard operating procedure
SP .....	Support Specialist(s)
SPECI .....	Nonroutine (Special) Aviation Weather Report
STARS .....	Standard terminal automation replacement system
STMC .....	Supervisor Traffic Management Coordinator

Abbreviation	Meaning
STMCIC .....	Supervisory Traffic Management Coordinator-in-Charge
STMP .....	Special traffic management program
SUA .....	Special use airspace
sUAS .....	Small Unmanned Aircraft System(s)
SVFR .....	Special visual flight rules
SWAP .....	Severe weather avoidance plan
SWS .....	Surface Weather System
T&A .....	Time and attendance
TAC .....	Terminal area chart
TACAN .....	Tactical air navigation aid
TCA .....	Tactical Customer Advocate
TCAS .....	Traffic alert collision and avoidance system
TCDD .....	Tower cab digital display
TCF .....	Traffic Flow Management Convective Forecast Produce
TDLS .....	Terminal Data Link System
TDW .....	Terminal display workstation
TDWR .....	Terminal Doppler weather radar
TEC .....	Tower en route control
TELCON .....	Telephone Conference
TERPS .....	Terminal instrument procedures
TFMS .....	Traffic Flow Management System
TFR .....	Temporary flight restriction
TM .....	Traffic management
TMC .....	Traffic management coordinator
TMI .....	Traffic management initiatives
TMU .....	Traffic management unit
TRACAB .....	Terminal radar approach control in tower cab
TRACON .....	Terminal radar approach control
TRSA .....	Terminal Radar Service Area
TSD .....	Traffic situation display
UA .....	routine PIREPs
UAS .....	Unmanned Aircraft System(s)
UASFM .....	Unmanned Aircraft System(s) Facility Map
USS .....	Unmanned Aircraft System(s) Service Supplier
UFO .....	Unidentified flying object
UHF .....	Ultrahigh frequency
UPT .....	User Preferred Trajectory
USAF .....	United States Air Force
USN .....	United States Navy
UTC .....	Coordinated universal time
UUA .....	urgent PIREPs
VAR .....	Volcanic activity report
VASI .....	Visual approach slope indicator
VCE .....	VSCS/Console Equipment
VEARS .....	VSCS Emergency Access Radio System
VFR .....	Visual flight rules



Abbreviation	Meaning
VHF .....	Very high frequency
VMC .....	Visual meteorological conditions
VOR .....	Omnidirectional VHF navigational aid
VORTAC .....	Collocated VOR and TACAN navigational aid
VR .....	VFR MTR
VSCS .....	Voice Switching and Control System
VTABS .....	Voice switching and control system training and backup system
WARP .....	Weather and Radar Processing
WC .....	Weather coordinator
WFO .....	Weather Forecast Office
WINGS .....	Weather Information and Navigational Graphics System
WMSCR .....	Weather Message Switching Center Replacement
WRA .....	Weather Reconnaissance Area
WSD .....	Web Situation Display
WSO .....	Weather Service Office
WSP .....	Weather System Processor



## Chapter 2. Administration of Facilities

### Section 1. General

#### 2-1-1. INTERREGIONAL REQUIREMENTS

a. An air route traffic control center (ARTCC) is responsible to an En Route and Oceanic Operations Area Office. Terminal and Flight Service facilities located within an ARTCC operational area must comply with the En Route and Oceanic Operations Area Office directives governing interfacility operational requirements. Although these facilities are not under its administrative jurisdiction, the En Route and Oceanic Operations Area Office responsible for the administration of the ARTCC must provide these directives to the appropriate facilities in ARTCC operational areas. These facilities must coordinate directly on mutual procedural or operational requirements.

b. When the resolution of procedural or operational problems is not possible or when the En Route and Oceanic Operations Area Office directives are incompatible with those published by the administratively responsible area office, the facility must notify its own Terminal Operations Area or Flight Service Safety and Operations Group for resolution.

#### 2-1-2. FACILITY STANDARD OPERATING PROCEDURES DIRECTIVE

The air traffic manager must issue a Standard Operating Procedures (SOP) Directive. The directive must specify, as a minimum, the required procedures for maintaining a safe and efficient operation and the jurisdictional boundaries for each operational position/sector.

a. Review SOPs at least annually and update as necessary. Examine current SOPs for practices and/or procedures that are no longer required. Review includes both content and relevance that achieve full operational efficiency and customer flexibility.

b. Review and, if necessary, update SOPs when new or revised instrument flight procedures are published or pertinent national procedures are implemented or changed.

#### **NOTE-**

*Information related to subscribing for alerts regarding*

*upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures/](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/).*

#### **REFERENCE-**

*FAA Order JO 7210.3, Para 2-1-6, Checking Accuracy of Published Data.*

*FAA Order JO 7210.3, Para 4-1-1, Correspondence Standards.*

*FAA Order JO 7210.3, Para 4-3-3, Developing LOA.*

*FAA Order JO 7210.3, Para 4-3-7, Annual Review/Revisions.*

c. Ensure noise abatement procedure commitments are included in the SOP or other facility directives and identified as such.

#### **NOTE-**

*Noise abatement procedure commitments are the result of the NEPA process or other formal/informal agreements.*

#### 2-1-3. POSITION/SECTOR BINDERS

Air traffic managers must develop and maintain binders for each position/sector within the facility. In addition to the above, this must include a supervisor position binder. The supervisor position binder should address procedures that will enhance controller performance in areas such as scanning, coordination, use of proper phraseology, and proficiency/remedial training. The binders must contain as a minimum, but not be limited to, the information listed in the En Route, Terminal, Flight Service Option Specific Guidelines. The binder must contain information that is necessary for the safe and efficient operation of each position/sector, including examples and formats where appropriate. A copy of each binder must be in a location easily accessible by each position/sector. Data may be stored and displayed via electronic means, e.g., on Information Display Systems (IDS), where available. Air traffic managers in terminal facilities may determine the need for individual binders for associated/coordinator positions.

#### 2-1-4. REFERENCE FILES

Air traffic managers must maintain current sets of orders, facility directives, Letters of Agreement (LOA), aeronautical charts, pertinent International Civil Aviation Organization (ICAO) documents and related publications so that they may be readily

available for operational use and study by facility personnel. Also, the air traffic manager must maintain reference materials at appropriate work areas. These materials must consist of pertinent directives, agreements, emergency and overdue aircraft procedures, and a location listing of airports within the area of responsibility including runway alignment, lighting, surface, and length as a minimum. Current telephone numbers of user companies/organizations identifying the source who has the capability of contacting no radio (NORDO) aircraft may also be listed. Air traffic managers must determine the applicability of other materials to be included.

**NOTE—**

*The air traffic manager will ensure that the user list is kept current.*

## **2-1-5. RELEASE OF INFORMATION**

**a.** It is FAA policy to make factual information available to persons, properly and directly concerned, except information held confidential for good cause.

**b.** Except as provided in this and other FAA orders, or when specifically authorized to do so by the Secretary of Transportation or the Administrator, no agency employee must release information from any National Airspace System (NAS) database regarding the position, altitude, heading, flight plan, origination or destination of a single aircraft (“Flight Track Data”) upon the oral request of an individual outside of the FAA.

**1.** No request for Flight Track Data must be granted unless it is first determined that the request is being made in the interest of aviation safety or efficiency, or for an official purpose by a United States Government agency or law enforcement organization with respect to an ongoing investigation.

**2.** No Flight Track Data on aircraft conducting military, law enforcement, presidential, or other sensitive flights must be released except as operationally required to assist such flights.

**3.** Each request must be handled in the following manner:

**(a)** The agency employee must positively identify the requestor by name, organization or

affiliation, and point-of-contact (including a telephone call-back number).

**(b)** The agency employee must inquire about the purpose of the request so as to determine whether the request is being made in the interest of aviation safety or efficiency, or for an official purpose.

**(c)** Except for requests received from any United States Government agency or law enforcement organization, the agency employee must enter into the facility Daily Record of Facility Operation, FAA Form 7230-4, a record of the request, including:

**(1)** The information obtained under subparagraphs b3(a) and b3(b) above; and

**(2)** A summary of any information provided to the requestor, including the flight number or registration number of the aircraft in question.

**(d)** For requests received from any United States Government agency or law enforcement organization, the only information entered into the local facility log must be that called for by subparagraph b3(a) above, with a brief notation as to whether the request was granted or not.

**4.** If the request is from an individual and it is determined that the request, if granted, would not further aviation safety or efficiency, the employee must deny the request and may inform the requester that information may be sought under the Freedom of Information Act (FOIA). A FOIA request should be filed in writing with the FOIA Officer, ARC-40, 800 Independence Avenue, S.W., Washington, DC 20591, or by email to 7-AWA-ARC-FOIA@faa.gov.

**5.** If it cannot be ascertained whether the purpose of the request, if from an individual, is in furtherance of aviation safety or efficiency, or if from a United States Government agency or law enforcement organization, is for an official purpose, the agency employee must contact facility management for guidance. If local management is unable to determine whether or not a request should be granted, the official should contact the Quality Assurance Investigator on-call in Washington headquarters. En Route and Oceanic Operations, Terminal Operations, and Flight Service Safety and Operations Group may elect to process after-hour requests through the appropriate Service Area office Quality Assurance on-call specialist.

c. Federal Contract Flight Service Stations (FCFSS) must handle the release of information in accordance with contract requirements.

## 2-1-6. CHECKING ACCURACY OF PUBLISHED DATA

Air traffic managers and air traffic representatives (ATREPs) must ensure, upon receipt of official publications, that a review of data pertaining to their facilities and areas of concern is accomplished to ensure accuracy and completeness. When pertinent national procedures, aeronautical data (to include weather reporting locations), or flight procedures are created or changed, review facility standard operating procedures (SOPs) directives, position/sector binders, reference files, and/or letters of agreement (LOAs) and initiate corrections and briefings as required.

### NOTE-

1. Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures/](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/)

2. Additional digital AeroNav Products are available via the following websites:

a. [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures)

b. <http://aerochart.faa.gov>

3. Information on aeronautical data changes, including weather reporting locations, is available for free at the Aeronautical Information Services (AJV-A), Aeronautical Data web portal. Check 28-Day Subscription and Transmittal Letters at [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/aero\\_data/](https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/)

4. Notice to Air Missions information may be viewed on the Aeronautical Information System Replacement (AISR) or at <https://notams.aim.faa.gov/notamSearch>.

### REFERENCE-

FAA Order JO 7210.3, Para 2-1-2, Facility Standard Operating Procedures Directive.

FAA Order JO 7210.3, Para 2-1-3, Position/Sector Binders.

FAA Order JO 7210.3, Para 2-2-11, Personnel Briefings Regarding Orders, Published Aeronautical Data and Flight Procedures.

FAA Order JO 7210.3, Para 4-3-3, Developing LOA.

FAA Order JO 7210.3, Para 4-3-7, Annual Review/Revisions.

FAA Order 7930.2, Notices to Air Missions (NOTAM).

FAA Order JO 8260.19, Flight Procedures and Airspace.

FAA Order JO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

FAA Order JO 8260.43, Flight Procedures Management Program.

## 2-1-7. AIR TRAFFIC SERVICE DURING PLANNED AND UNPLANNED OUTAGES

The air traffic manager (ATM) must develop and maintain guidelines to provide continuity of required services during planned and, to the degree possible, during unplanned outages.

a. The ATM must collaborate with Technical Operations (Tech Ops) during any projected planned maintenance tasks that may impact air traffic control (ATC). The ATM must ensure affected air traffic stakeholders or appropriate subject matter experts (SMEs) are notified of planning meetings.

b. The ATM must review all project risk plans (PRP) received from Tech Ops. A PRP is a living document that promotes coordination and communication and reduces the risk to the National Airspace System (NAS) associated with project implementation. After review, the ATM must forward concur or non-concur via the notification email or directly through the corporate work plan portal link provided in the email. The ATM may forward questions or comments regarding the PRP directly through the notification email or by contacting the point of contact identified in the notification email.

c. Facility Standard Operating Procedures (SOP) must include the use of the Operational Risk Management Plan (ORMP), which is the formal document for review and approval that includes the plan for ATC to protect continuity of service.

### NOTE-

Operational Risk Management (ORM) training is available via eLMS.

1. The ORMP must be used in conjunction with local procedures to support the completion of formal ORM maintenance activities and projects.

2. Certain maintenance tasks that do not meet the criteria identified in subparagraph c1 may still have the potential for operational consequences locally. Air Traffic and Technical Operations should jointly identify these additional maintenance activities that will require an ORMP.

d. The ATM must develop an ORM section in the facility SOP. The facility SOP must identify persons or positions authorized to review and/or approve ORMPs for the facility. Additionally, the SOP must identify communication procedures to ensure team

members are notified in a timely manner of their team participation responsibilities.

**e.** All air traffic personnel identified in an ORMP are team members. Additional team members may be added for informational and increased situational awareness purposes and should address any concerns through the point of contact (POC)/reviewer or approver. The required air traffic team members consist of POC/reviewer and approver. Air traffic team members must:

1. Add additional team members as necessary.
2. Participate in ORMP meetings.
3. Review and comment on the ORMP.
4. Assess operational risks, identify any conflicting activities, and propose mitigations.
5. Maintain situational awareness until completion of the activity.
6. Contact the air traffic POC if the situation changes or the ORMP requires reassessment.

**f.** The air traffic POC/reviewer is responsible for coordination of the ORMP meeting with all affected air traffic stakeholders. The air traffic POC/reviewer:

1. Reviews the composition of the ORMP team and ensures the appropriate air traffic team members and/or air traffic approver have been assigned. When more than one facility is affected, ORMPs may require multiple reviewers or approvers.
2. Adds team members as appropriate.
3. Participates in ORMP meetings.
4. Ensures the completeness and feasibility of executing the ORMP, (shares responsibility with the air traffic approver).
5. Identifies any conflicting activities.
6. When the ORMP has been submitted for Air Traffic review, completes the air traffic mitigation plan element and submits the ORMP for approval. The System Support Center (SSC) manager will submit the plan to the Air Traffic and Tech Ops approvers.
7. Ensures the affected air traffic personnel are briefed and prepared to implement mitigations prior to commencing work.

**g.** The Air Traffic and Tech Ops approvers are responsible for the final review of the ORMP. Plans approved by Air Traffic and Tech Ops approvers are forwarded to Tech Ops personnel to perform the agreed-upon work. If a plan is not approved, the approver will select the Take 5 button in the ORMP tool and will notify the SSC manager or the initiator of their concern. The approvers:

1. Ensure the completeness and feasibility of executing the ORMP (shared responsibility with the air traffic POC/reviewer).
2. Approve the ORMP or select the Take 5 button with comments for additional consideration or follow-up.
3. Change role assignments or team members as necessary.
4. Identify any conflicting activities.
5. Ensure the High Visibility Event flag is set when it meets the appropriate definition outlined below.

**NOTE–**

*High Visibility Events are those that require upper management awareness because of their potentially significant impact on the NAS. These are events that if the worst-case scenario occurs, even with mitigations in place, could cause a hazardous situation in the NAS, change Operational Contingency Level (OCL), create a significant increase in workload for ATC, or cause aircraft to be held or diverted, especially at High Impact facilities.*

**h.** The majority of interactions with Tech Ops will not involve a PRP or an ORMP. Therefore, the facility must develop and incorporate procedures into the facility SOP for the coordination of maintenance activities which may affect the ability of the facility to provide air traffic services. These procedures must be consistent with the Principles of ORM outlined below and take into consideration the facility's unique operational circumstances. Air traffic personnel will use these procedures when coordinating and executing planned outages and maintenance tasks with Tech Ops.

**i. Principles of ORM.**

**1. Situational Awareness.** Understand the current state and dynamics of the operation and remain vigilant for future changes and developments. Considerations include:

- (a) Peak and off-peak traffic periods.

(b) Weather conditions.

(c) Known concurrent activities that could impact, or be impacted by this activity. Example: VIP movement, airshows, other outages, etc.

(d) Additional outages in your facility or adjacent facility.

(e) Current staffing/operational oversight.

(f) Other communication/surveillance equipment available as an alternate means of providing air traffic services.

**2. Plan Actions.** The method and resources needed to accomplish the activity. Considerations include:

(a) Review break rotations/staffing plan to ensure positions are staffed accordingly.

(b) Review applicable (e.g., FAA Order JO 1900.47) Air Traffic Control Operational Contingency Plans.

(c) Brief affected staff prior to outages of the credible risks and potential impacts including worst-case scenarios and alternate procedures.

(d) Identify the Tech Ops POC if immediate contact is needed.

(e) Test back-up equipment before releasing the primary equipment to be worked on (where applicable).

**3. Identify operational consequences.** Identify the NAS systems and air traffic stakeholders that will, or could potentially be affected during the execution of the plan. Considerations include:

(a) Credible risks and potential impacts including worst-case scenarios that could affect air traffic's ability to provide service.

(b) Affected facilities, sectors/areas, positions, or other stakeholders participating in, or potentially impacted by the activity.

(c) Adverse effects to ATC personnel safety.

**4. Communicate.** An ongoing exchange of information between Technical Operations and air traffic personnel is essential for the review of the potential operational consequences and development of mitigation strategies. The information must be received, understood, and, in some cases, approved. Considerations include:

(a) Identified credible risks and potential impacts including worst-case scenarios.

(b) Mitigation Strategies.

(1) Include using the back-up equipment/systems, alternate channels, etc.

(2) Confirm proper operation of support equipment, standby equipment and/or backup systems prior to conducting the scheduled activity.

(3) Confirm Technical Operations and Air Traffic are prepared to implement their mitigation strategies.

(c) Notify Tech Ops immediately of any circumstances that may affect the procedure/task, e.g., change in operational hours, unusual circumstances, or operational configurations.

(d) "Take-5," if needed (to gain more information or reassess approval).

(e) Discuss and/or document effectiveness of plan for future reference or training.

**5. Coordinate.** Considerations include:

(a) Coordinating the activity with the appropriate adjacent facilities.

(b) Additional coordination and notification requirements should there be a change to planned activity.

(c) Notify Regional Operations Center (ROC), Domestic Events Network (DEN), or facility management (when applicable).

(d) Verify the equipment status and configuration upon completion of the activity.

(e) Ensuring that Out for Maintenance (OFM) and Return to Service (RTS) are recorded on FAA Form 7230-4, Daily Record of Facility Operations.

**j.** For unplanned outages, the ATM must develop and maintain operational plans that provide continuity of services to the extent dictated by the outage. The plans must be in accordance with FAA Order JO 1900.47.

## **2-1-8. OPERATIONS DURING A STAFFING CONSTRAINT**

The following steps must be followed when traffic management initiatives (TMI), ATC-0, or any reduction in ATC services are being considered due to staffing constraints:

a. The Air Traffic Manager (ATM) or their designee must contact the General Manager (GM) or Assistant General Manager (AGM) or their designee and provide the factors of the staffing shortage, expected duration, facility mitigations implemented, and any other related information. If the situation can be mitigated by other means and no TMIs, ATC-0 declaration, or reduction in services is required, the GM or AGM or their designee will determine if a Staffing Trigger Form should be initiated and coordinated with the Deputy Director of Operations (DDO).

b. If it is determined that TMIs are required, ATC-0 is unavoidable, or a reduction in services is required, then the GM, AGM, or their designee must notify the DDO for their concurrence. The GM or AGM or their designee must obtain DDO approval before submitting the Staffing Trigger Form to the National Operations Manager (NOM) and Joint Air Traffic Operations Command (JATOC).

c. If the DDO agrees that TMIs, ATC-0, or reductions in service are required, the facility will submit the Staffing Trigger Form to the NOM. The DDO will also initiate an upward notification to the AJT Vice President/Deputy Vice President (VP/DVP) or their designee immediately, detailing the impact to the NAS.

#### **NOTE-**

1. *Situations involving a minor disruption of air traffic services or a short duration ATC-0 situation that does not have an impact on the NAS should be reported to the DDO. The DDO will determine if a Staffing Trigger Form is to be submitted to the NOM. (e.g., a facility is opening a few minutes late without flight delays, airborne holding, or flight diversions.)*

2. *The Staffing Trigger form is a fillable form created to ensure that the collection of key data elements related to a staffing constraint is captured and available to be forwarded to the NOM for upward distribution. The Staffing Trigger form is accessible at: <https://ksn2.faa.gov/ajt/Home/AJT23/BURST/Pages/default.aspx>*

#### **REFERENCE-**

FAA Order JO 7110.65, Para 11-1-2, Duties and Responsibilities.  
FAA Order JO 7210.3, Chapter 18, Section 7, Traffic Management Initiatives.

## **2-1-9. HANDLING BOMB THREAT INCIDENTS**

Air Traffic facilities must establish procedures to carry out their functions in accordance with FAA Order 1600.6, Physical Security Management Program. The following provisions must be incorporated into facility plans:

a. All air traffic facilities must notify the respective regional operations center and other appropriate Service Area office element when a bomb threat occurs.

b. All personnel in the facility will be advised when a bomb threat has been received and of pertinent information regarding the bomb threat.

c. The decision to evacuate a facility will be made by the air traffic manager or his/her designee.

d. If the decision is made to evacuate and air safety is not a factor, immediately release nonessential personnel, instruct aircraft to contact the appropriate facility designated in the facility contingency plan, advise adjacent facilities as appropriate (ARTCCs should advise the ATCSCC of pending evacuation), broadcast that the facility is being evacuated, and evacuate the building.

e. If the decision is made to evacuate and air safety is a factor, immediately release nonessential personnel, resolve traffic conflicts (aircraft on radar vectors should be cleared to resume normal navigation), instruct aircraft to contact the appropriate facility designated in the facility contingency plan, advise adjacent facilities (ARTCCs should advise the ATCSCC), broadcast that the facility is being evacuated, and evacuate the building as rapidly as personnel can be released. The appropriate actions should be accomplished quickly to minimize personnel exposure. Further, the air traffic manager or his/her designee will determine which personnel will remain on duty until the traffic situation is resolved. Personnel designated to perform this function normally will be selected from the supervisory ranks or persons volunteering temporary services. To be effective this action should be planned in advance. There are various ways in which this can be accomplished. One simple method is that at the beginning of each watch, supervisors will plan their watch coverage should the need to evacuate arise.



**f.** The evacuation plans will also include recall procedures.

**g.** Consideration should be given to establishing an alternate site to provide limited flight service or airport air traffic and approach control services.

**NOTE—**

*Processes for the establishment of alternate sites and divestiture of airspace/responsibilities are outlined in FAA Order JO 1900.47 and facility Operational Contingency Plans (OCPs).*

**h.** During bomb threat situations, facility air traffic managers or their designees should exercise discretion regarding admittance of visitors to their facilities.

**i.** Facilities will take action to increase the security whenever such action is feasible. Measures to protect administrative and operational areas and equipment rooms should be taken. FAA Order 1600.6, Physical Security Management Program, provides additional guidance for the protection of agency facilities, installations, equipment, etc. Examples are:

1. Increase security forces and measures.

2. Ensure that facilities are kept tidy so that out-of-place articles can be easily detected. This concept should be emphasized to all personnel including contractors and their employees.

3. Room or area monitors can be assigned to “look over” the area at frequent intervals for suspicious objects. In this regard, air traffic personnel assigned temporary administrative duties would be given building warden responsibilities.

**REFERENCE—**

*FAA Order JO 7210.3, Para 2–8–2, Medical Clearance Requirements.*

4. Outside areas should be kept as neat as possible. Landscaping should, if possible, be done in a manner that will not enhance clandestine activities.

**j.** Although it is envisioned that the foregoing will be accomplished within existing resources, planning (including budgeting) should be initiated to establish a secure environment.

**k.** Release information on bomb threat incidents in accordance with the procedures established in current directives. Where no applicable procedures have been established, all information must be treated as “For Official Use Only.”

## 2–1–10. HANDLING MANPADS INCIDENTS

**a.** Air traffic managers must coordinate with federal, local, and other law enforcement agencies, as needed, to develop notification and contingency plans during a threat or attack from Man–Portable Air Defense Systems (MANPADS).

**b.** Air traffic managers must establish procedures to ensure the dissemination of MANPADS alert level 2 (credible threat)/alert level 3 (reported attack) and post-event activity via ATIS and/or controller-to-pilot transmissions. These reports must continue until notified otherwise by the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).

**REFERENCE—**

*FAA Order JO 7110.65, Para 2–9–3, Content.*

*FAA Order JO 7110.65, Para 10–2–13, MANPADS Alert.*

*FAA Order JO 7610.4, Para 15–1–3, Responsibilities.*

**c.** Air traffic managers must ensure the Operations Manager/OS/controller-in-charge (CIC) notifies the DEN ATSC of any MANPADS threat or attack as soon as possible. In the event of an observed or reported MANPADS launch, the initial report to the DEN ATSC must include the following information:

1. Call sign (if known);

2. Type aircraft (if known);

3. Coordinated Universal time;

4. Position/location of event;

5. Altitude (if known); and

6. Any other pertinent information (e.g., contrail sighting, additional pilot or ATC observation reports, law enforcement contact, etc.).

## 2–1–11. AIRPORT EMERGENCY PLANS

**a.** Operational instructions covering airport emergency service at airports served by an ATCT and/or FSS must be issued by the air traffic manager (the ATCT manager at airports with both facilities) in the form of a LOA. Procedures and/or LOAs for alerting airport emergency equipment at other public–use airports served by the ATCT and/or FSS must also be developed, if deemed appropriate.

**NOTE—**

*Facility managers or their designee should meet with Airport Rescue and Fire Fighting (ARFF) personnel on an annual basis to review the local airport emergency service LOA and the effectiveness of local procedures.*

**REFERENCE–**

FAA Advisory Circular AC 150/5210–7, *Aircraft Rescue and Fire Fighting Communications*.

**b.** Responsibility for the prompt dispatch of equipment upon alert notice by the FAA ATCT or the FSSs is the joint responsibility of the airport management and the emergency equipment operator. The amount of equipment and number of personnel responding to the emergency will be determined by the equipment operator and should be kept to the minimum required. After receiving the alert and the route to be taken, the personnel operating the equipment are responsible for handling the emergency.

**c.** Procedures for alerting airport emergency equipment, including additional equipment which may be located off the airport, must consist only of:

**1.** Stating the nature and the location of the emergency by means of a signalling system; e.g., a siren and/or telephone. When required, the tower must indicate the route to be taken by the emergency equipment. FSSs must not specify such routes.

**2.** Specifying, when required, the category of alert applicable to the emergency.

**3.** Initiating the alert when, in the opinion of any of the following, a potential or actual emergency exists:

- (a) The FAA specialists on duty.
- (b) The pilot of the aircraft concerned.
- (c) The operator of the aircraft or his/her representative.
- (d) A representative of the airport management.

**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 150/5210–7, *Aircraft Rescue and Fire Fighting Communications*.

## **2–1–12. 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 must 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.

## 2-1-13. INTERSECTION TAKEOFFS

Air traffic managers at ATCTs and at 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 Chart Supplement U.S. 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 Chart Supplement U.S. 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.

## 2-1-14. 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 must 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 military representative assigned to the Service Area office.

c. Civil aircraft other than air carrier: Advise Mission Support Services, Aeronautical Information Services, at [Callsigns@faa.gov](mailto:Callsigns@faa.gov) 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 must 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.

## 2-1-15. APPROACH CONTROL AIRSPACE

With the advancement of technologies, the air traffic services provided by en route facilities and terminal facilities are becoming more integrated. Terminal airspace should be adjusted to match the services provided. Although en route services are an ARTCC function, terminal facilities may be expected to provide some en route service. There are some areas

in which an ARTCC 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, en route facilities may have radar coverage, and better service would be provided if some approach control airspace is recalled to the ARTCC. At certain locations, the en route facility may be able to absorb all the airspace of a nonradar approach control. Prior to implementing airspace changes, en route and terminal facility managers must work together to ensure the delegated approach control airspace best meets the needs of the airspace area.

## **2-1-16. 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 paragraph 10-5-3, Functional Use of Certified Tower Radar Displays.

**c.** An authorization for towers to provide separation services other than those prescribed in subparagraphs a and b must 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 must, 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.

## **2-1-17. BIRD HAZARDS**

The air traffic manager of the ATCT must 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.

## **2-1-18. PROHIBITED/RESTRICTED AREAS AND STATIONARY ALTRVS**

FAA Order JO 7110.65, Air Traffic Control, prescribes separation requirements from special use, ATC-assigned airspace, and stationary ALTRVs. In recognition of the fact that prohibited/restricted areas and stationary ALTRVs may be 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, ATC-assigned airspace, and stationary ALTRVs is to establish a buffer between nonparticipating aircraft and aircraft operations inside special use, ATC assigned airspace, and stationary ALTRVs. 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 FAA Order JO 7110.65 is not considered necessary whenever the prohibited/restricted airspace and stationary ALTRV 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 must be guided by the following:

**a.** Determine the exact nature of prohibited/restricted area and stationary ALTRV 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.** 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.

## **2-1-19. SPECIAL AIR TRAFFIC RULES (SATR) AND SPECIAL FLIGHT RULES AREA (SFRA)**

The Code of Federal Regulations prescribes special air traffic rules for aircraft operating within the boundaries of certain designated airspace. These areas are listed in 14 CFR Part 93 and can be found throughout the NAS. Procedures, nature of operations, configuration, size, and density of traffic vary among the identified areas.

**a.** Special Flight Rules Areas are areas of airspace wherein the flight of aircraft is subject to special air traffic rules set forth in 14 CFR Part 93, unless otherwise authorized by air traffic control. Not all areas listed in 14 CFR Part 93 are Special Flight Rules Areas, but special air traffic rules apply to all areas designated as SFRA.

### **REFERENCE-**

*14 CFR Part 93, Special Air Traffic Rules*  
*P/CG, SPECIAL AIR TRAFFIC RULES (SATR)*  
*P/CG, SPECIAL FLIGHT RULES AREA (SFRA)*

**b.** Each person operating an aircraft to, from, or within airspace designated as a SATR area or SFRA must adhere to the special air traffic rules set forth in 14 CFR Part 93, as applicable, unless otherwise authorized or required by ATC.

## **2-1-20. ATC SECURITY SERVICES FOR THE WASHINGTON, DC, SPECIAL FLIGHT RULES AREA (DC SFRA)**

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 OS/CIC must 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 must:**

**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 must 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 must be held outside of the security services area in accordance with FAA Order JO 7110.65, paragraph 9–2–1, Aircraft Carrying Dangerous Materials, subparagraph 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 must be issued by the appropriate radar position in accordance with FAA Order

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 must 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.

## **2–1–21. AIRPORT TRAFFIC PATTERNS**

**a.** The Service Area Directors of Air Traffic 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, Non-Towered Airport Flight Operations.

**b.** FAA Order 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.

## **2–1–22. OBSTACLE IDENTIFICATION SURFACES, OBSTACLE FREE ZONES, RUNWAY SAFETY AREAS, APPROACH/DEPARTURE HOLD AREAS, AND CLEARWAYS**

**a.** Facility air traffic managers must 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 must 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, Approach/Departure Hold Areas, 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 proposed solutions and establishing local procedures to define conditions when the Approach/Departure Hold Areas and other surfaces must be protected. These procedures must be included in a facility directive and the signage at the intended hold position must be consistent with the phraseology identified in FAA Order JO 7110.65, paragraph 3-7-2, Taxi and Ground Movement Operations.

d. ATMs must consult with the airport authority, Flight Standards, Airports, and the Regional Runway Safety Program Manager (RSPM) when developing proposed solutions and establishing local procedures. The RSPM will assist the ATM, as needed, in initiating contact with Flight Standards and Airports.

#### **REFERENCE-**

*P/CG Term – Approach/Departure Hold.*

### **2-1-23. FACILITY IDENTIFICATION**

a. Service Area Directors are the focal point to review/approve requests for waivers for facility identification changes in FAA Order JO 7110.65, Air Traffic Control, paragraph 2-4-19, Facility Identification, subparagraphs a, b, and c. The Flight Service Safety and Operations Group (AJR-B100) is the focal point to review/approve requests for waivers for facility identification changes in FAA Order JO 7110.10, Flight Services, paragraph 11-1-14, Facility Identification, subparagraph f. If the waiver request is approved, the Service Area Director or the Director of Flight Service, as appropriate, must 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 must forward a copy of the approval to System Operations Services.

### **2-1-24. 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.

### **2-1-25. OUTDOOR LASER DEMONSTRATIONS**

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

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

### **2-1-26. 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 must 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.

### **2-1-27. SUBMISSION OF AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA) DATA**

Air Traffic Service Area offices submit data on all ATCAAs used on a continuing/constant basis, and any subsequent changes to the ATCAA database to 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. Transmittal memorandum containing a brief overview of the ATCAA, and/or changes to, FAA headquarters, and System Operations Airspace and Aeronautical Information Services. 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.*

## **2–1–28. 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.

## **2–1–29. REPORTING UNAUTHORIZED LASER ILLUMINATION OF AIRCRAFT**

Consistent with the provisions of Air Traffic Service, Duty and Operational Priorities; all Air Traffic Control facilities, FAA Contract Towers, and Flight Service Stations must report unauthorized laser illumination incidents as follows:

**a.** Contact local law enforcement or the Federal Bureau of Investigation (FBI) as soon as possible providing location, description, and other pertinent information regarding the incident;

**b.** Report the incident to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC);

**c.** Record the incident via the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program or, if CEDAR is not available, via the appropriate means, in accordance with FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting;

**d.** Provide the following information when reporting the incident via the DEN and CEDAR:

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

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

**3.** Type of aircraft.

**4.** Nearest major city.

**5.** Altitude.

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

**7.** Brief description of the event.

**8.** Any other pertinent information.

**9.** Law enforcement contact information.

**NOTE–**

*Facilities without direct access to the DEN should forward the information through the Washington Operations Center Complex (WOCC) to the DEN.*

**REFERENCE–**

*FAA Order JO 7110.65, Para 2–9–3, Content.*

*FAA Order JO 7110.65, Para 10–2–14, Unauthorized Laser Illumination of Aircraft.*

## **2–1–30. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES**

**a.** Facility air traffic managers must ensure that the operational supervisor/controller-in-charge promptly reports any suspicious aircraft/pilot activities to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).

**NOTE–**

*Additional information for ATC on identifying suspicious situations is located in FAA Order JO 7610.4, Special Operations, Chapter 7, Section 3, Suspicious Aircraft/Pilot Activity.*



**b.** The DEN ATSC must be notified as soon as possible of any suspicious activity, including the following:

**1.** Radio communications are lost or not established. Consider any IFR aircraft that is NORDO for more than 5 minutes as suspicious. This includes all aircraft (for example, general aviation, law enforcement, military, medevac) regardless of transponder code. ATC actions taken to establish communications with the NORDO aircraft must be reported to the DEN ATSC.

**2.** An aircraft fails to turn on or changes from its assigned transponder beacon code (other than approved emergency/radio failure beacon code).

**3.** An aircraft deviates from its assigned route of flight/altitude and refuses to return to it when instructed.

**4.** Phantom or inappropriate transmissions such as unusual questions about military activities or sensitive/secure areas.

**5.** Inconsistent or abnormal repetitive aircraft activity such as; flights over/near sites of interest or prohibited/restricted airspace, inappropriate speed or rate of climb/descent, or missed crossing restrictions or reporting points.

**6.** Pilot reports flight difficulties with no eventual explanation or response to ATC.

**7.** Any air carrier, cargo, or scheduled air taxi that requests to divert from its original destination or route for any reason other than weather or routine route changes should be considered by ATC as suspicious activity.

**8.** Any general aviation arriving from an international departure point that requests to divert from the original U.S. destination airport.

**9.** Other general aviation and non-scheduled air taxi or charter services that request to divert from the original destination or route for any unusual reason (e.g., reasons other than weather, company request, passenger request, mechanical, etc.) should be considered by ATC as suspicious activity.

**10.** Any other situation that may indicate a suspicious aircraft, including any reported or observed unauthorized unmanned aircraft activity or remote controlled model aircraft that deviate from

normal practice areas/flight activities would be considered suspicious or a safety hazard.

**REFERENCE–**

FAA Order JO 7110.65, Para 2–1–2, Duty Priority.  
Advisory Circular 91-57, Model Aircraft Operating Standards.

**11.** Any situation or pilot activity (for example, background noise, change in pilot's voice characteristics, etc.) that may indicate a hijacked aircraft. Due to air to ground communications capabilities (e.g., data links, cellular phones), ATC facilities may learn of a hijack situation from alternate sources (for example, airline air operations center) rather than the aircrew itself.

## **2–1–31. REPORTING DIVERTED AIRCRAFT ARRIVING FROM INTERNATIONAL LOCATIONS**

Any aircraft departing from an international location that diverts to a U.S. Airport, or is diverted and lands at a U.S. airport different from the original U.S. destination airport, must be reported to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC). In addition, any diverted aircraft that ATC identifies as suspicious (in accordance with paragraph 2–1–30) must be promptly reported to the DEN ATSC.

**NOTE–**

*Weather, airport/runway conditions, or other unforeseen reasons may necessitate an aircraft to divert or be diverted on short notice. Reporting via the DEN assists U.S. Customs and Border Protection (CBP) with real-time notification of the airport change.*

## **2–1–32. REPORTING SUSPICIOUS UAS ACTIVITIES**

Consistent with the provisions of Air Traffic Service, Duty, and Operational Priorities, all Air Traffic Control facilities, FAA Contract Towers, and Flight Service Stations must report suspicious UAS. Suspicious UAS operations may include operating without authorization; loitering in the vicinity of sensitive locations (e.g., national security and law enforcement facilities and critical infrastructure); or disrupting normal air traffic operations resulting in runway changes, ground stops, pilot evasive action, etc. Reports of a UAS operation alone do not constitute suspicious activity. Development of a comprehensive list of suspicious activities is not possible due to the vast number of situations that could be considered suspicious. ATC must exercise

sound judgment when identifying situations that could constitute or indicate a suspicious activity.

**a.** Notify local authorities (e.g., airport/local law enforcement; airport operations; and/or the responsible Federal Security Director Coordination Center) in accordance with local facility directives, including Letters of Agreement with the airport owner/operator.

**b.** Report the incident to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).

**c.** Record the incident via the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program or, if CEDAR is not available, via the appropriate means, in accordance with FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting.

**d.** Notify the air traffic manager.

**e.** Provide the following information when reporting the incident via the DEN and CEDAR:

**1.** UTC date and time of incident.

**2.** Reporting source(s).

**3.** Position: fixed radial distance, bearing and distance, landmark, altitude, and heading.

**4.** Flight behavior (i.e., loitering, heading toward the airport).

**5.** UAS type (e.g., quadcopter, fixed wing), if known.

**6.** Report operational impacts in accordance with paragraph 21-4-1, Domestic Events Network (DEN), of this order.

**f.** Attempt to obtain additional information relevant to the suspicious UAS including:

**1.** Size and color.

**2.** Number of reported/sighted UAS.

**3.** Location of the person(s) operating the UAS.

**4.** Remote pilot information including name, address, and phone number, if obtained by local law authorities or other verifiable means.

**g.** Facilities must maintain a checklist that provides guidance on reporting suspicious UAS activities. At a minimum, this checklist must be

available to Operations Supervisor (OS), Controller-in-Charge (CIC), and Operations Manager (OM) personnel. Facilities must consider the following for inclusion on the checklist:

**1.** Items a through f of this paragraph.

**2.** Contact information necessary for completing the notification requirements of this paragraph.

**3.** Local factors that may be necessary in determining if an operation is suspicious (e.g., location of critical infrastructure).

**4.** A requirement to notify the Regional Operations Center (ROC) for security-related events that may generate significant media or congressional interest as required by FAA Order JO 1030.3.

**5.** Any other information as deemed necessary by the air traffic manager.

#### **REFERENCE—**

*FAA Order JO 7110.65, Para 2-1-2, Duty Priority.*

*FAA Order JO 7610.4, Para 7-3-1, Application.*

*FAA Order JO 1030.3, Initial Event Response, Chapter 2, Upward Notification.*

*FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting. Advisory Circular 91-57B, Exception for Limited Recreational Operations of Unmanned Aircraft.*

*P/CG Term – Suspicious UAS.*

## **2-1-33. USE OF UAS DETECTION SYSTEMS**

Airport owners/operators or local enforcement may contact ATC facilities to coordinate their acquisition, testing, and operational use of UAS detection systems. These systems and how they are used may have implications for FAA regulations for airports; potentially affect ATC and other Air Navigation Services systems (e.g., RF interference with radars); and/or trigger airport responses (e.g., closing runways), which must be coordinated with ATC.

**a.** Requests by airport authorities for ATC facility cooperation/authorization in the acquisition, testing, or use of UAS detection systems will be referred to the appropriate FAA Airports District Office (ADO). The ADO will initiate internal FAA coordination, including reviews by the responsible ATO offices and facilities.

**b.** ATC facilities must not enter into any verbal or written agreement with a commercial vendor or an airport authority regarding UAS detection capabilities without prior coordination and approval from HQ-AJT-0.

**NOTE–**

1. UAS detection systems do not include the interdiction components that characterize UAS mitigation technologies, also referred to as Counter Unmanned Aircraft System (C-UAS) technologies. Only select Federal Departments and Agencies have the legal authority to use C-UAS systems in the NAS. The FAA does not support the use of this technology by other entities without this legal authorization.

2. The FAA does not advocate the use of UAS detection in the airport environment until appropriate policy and procedures are developed.

## **2-1-34. USE OF COUNTER UNMANNED AIRCRAFT SYSTEMS (C-UAS)**

Select Departments and Agencies, which have been legally authorized to use this technology, are operationally using Counter Unmanned Aircraft System systems (C-UAS) in the NAS to protect certain facilities and assets. C-UAS systems are capable of disabling, disrupting, or seizing control of a suspicious UAS, and may integrate or be linked to UAS detection capabilities. These Departments and Agencies are required to coordinate with the FAA to assess and mitigate risks to the NAS posed by these C-UAS systems. These systems and their deployment may affect ATC and other Air Navigation Services systems (e.g., RF interference with radars); which could impact other air traffic in the vicinity including legitimate, compliant UAS flights. Additionally, the C-UAS may involve the response and deployment of ground/airborne operational security assets, which must be coordinated with ATC.

a. The Joint Air Traffic Operations Command (JATOC) Air Traffic Security Coordinator (ATSC) team, which manages the Domestic Events Network (DEN), must notify affected ATC facilities when C-UAS systems are activated.

**NOTE–**

Only select Federal Departments/Agencies have been legally authorized to utilize C-UAS to cover certain facilities and assets, and with coordination with the FAA to address risks to the NAS. Risk mitigation for the NAS typically includes notification to potentially affected ATC facilities.

b. The DEN must alert all ATC facilities affected by C-UAS deployment and JATOC National Operations Control Center (NOCC) of any possible operational impacts.

1. The alerts will focus on real-time reporting regarding possible operational impacts of C-UAS activities providing the affected facilities with heightened awareness to potential flight and equipment anomalies; and will allow the facilities to take actions needed to sustain safe operations.

2. The alerts must be made via landline communications and must not be broadcast over radios, shout lines, or direct dial lines to air traffic controllers on position.

3. The affected ATC facilities must not discuss C-UAS operations with any outside entity.

## **2-1-35. REPORTING DEATH, ILLNESS, OR OTHER PUBLIC HEALTH RISK ON BOARD AIRCRAFT**

a. When an air traffic control facility is advised of a death, illness, and/or other public health risk, the following information must be forwarded to the DEN:

1. Call sign.
2. Number of suspected cases of illness on board.
3. Nature of the illness or other public health risk, if known.
4. Number of persons on board.
5. Number of deaths, if applicable.
6. Pilot's intent (for example, continue to destination or divert).
7. Any request for assistance (for example, needing emergency medical services to meet the aircraft at arrival).

**NOTE–**

1. If the ATC facility is not actively monitoring the DEN or does not have a dedicated line to the DEN, they must call into the DEN directly via 844-432-2962 (toll free).

2. Except in extraordinary circumstances, such as a situation requiring ATC intervention, follow-on coordination regarding the incident will not involve ATC frequencies.

3. The initial report to a U.S. ATC facility may be passed from a prior ATC facility along the route of flight.

b. Once notification of an in-flight death, illness, and/or other public health risk is provided by an ATC facility, the DEN Air Traffic Security Coordinator must ensure the Centers for Disease Control and

Prevention (CDC) Emergency Operations Center (EOC) receives the following information:

1. Call sign.
2. Number of suspected cases of illness on board.
3. Nature of the illness or other public health risk, if known.
4. Number of persons on board.
5. Number of deaths, if applicable.
6. Departure airport.
7. Arrival airport.
8. Estimated time of arrival.
9. Pilot's intent (for example, continue to destination or divert).
10. Any request for assistance (for example, a need for emergency medical services to meet aircraft at arrival).

**REFERENCE–**

FAA Order JO 7110.65, Para 10–2–19, Reporting Death, Illness, or Other Public Health Risk on Board Aircraft.

## **2–1–36. OPPOSITE DIRECTION OPERATIONS**

Opposite Direction Operations consists of IFR/VFR Operations conducted to the same or parallel runway where an aircraft is operating in a reciprocal direction of another aircraft arriving, departing, or conducting an approach.

**REFERENCE–**

FAA Order JO 7110.65, Para 1-2-2, Course Definitions.

**a. Each facility must:**

1. Determine the operational feasibility of conducting opposite direction operations.
2. At a minimum, develop the opposite direction operations procedures necessary to accommodate aircraft that have an operational need or receiving operational priority.

**REFERENCE–**

FAA Order JO 7110.65, Para 2-1-4, Operational Priority.

**b. For aircraft receiving IFR services that are conducting opposite direction operations to the same runway, facility directives must:**

1. Define minimum cutoff points identified by distance or fixes between:

- (a) An arrival and a departure.
- (b) An arrival and an arrival.

2. Specify that use of Visual Separation is not authorized, except at those unique locations that are operationally impacted by terrain and when issued a Letter of Authorization by the Service Area Director of Operations.

3. Require traffic advisories to both aircraft.

**EXAMPLE–**

*OPPOSITE DIRECTION TRAFFIC (distance) MILE FINAL, (type aircraft). OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY (number), (type aircraft). OPPOSITE DIRECTION TRAFFIC, (position), (type aircraft).*

4. Require the use of a memory aid.

5. Prohibit opposite direction same runway operations with opposing traffic inside the applicable cutoff point unless an emergency situation exists.

6. Specify the position/facility responsible for ensuring compliance with cutoff points between aircraft conducting opposite direction operations.

7. Contain the following minimum coordination requirements:

(a) Define the facility/position that is responsible for initiating coordination.

(b) All coordination must be on a recorded line and state “Opposite Direction.” Initial coordination must include call sign, type, and arrival or departure runway.

c. The cutoff points established under subparagraph b1 must ensure that required lateral separation exists:

1. When a departing aircraft becomes airborne and has been issued a turn to avoid conflict; or

2. When the first aircraft has crossed the runway threshold for opposite direction arrivals.

3. If the conditions in subparagraphs c1 and c2 are not met, facility directives must require action be taken to ensure that control instructions are issued to protect the integrity of the cutoff points.

d. At a minimum, the following must be considered when developing cutoff points:

1. Aircraft performance.
2. Type of approach.
3. Operational position configuration.
4. Runway configuration.
5. Weather conditions.
6. Existing facility waivers.

e. For aircraft receiving IFR services that are conducting opposite direction operations to parallel runways regardless of the distance between centerlines, facility directives must:

1. Ensure that a turn away from opposing traffic is issued when opposing traffic is inside the cutoff points defined in b1 for the other runway.

2. Specify that use of Visual Separation is authorized once a turn away from opposing traffic is issued.

**REFERENCE—**  
FAA Order JO 7110.65, Para 7-2-1, Visual Separation.

3. Require traffic advisories to both aircraft.

**EXAMPLE—**  
*OPPOSITE DIRECTION TRAFFIC (distance) MILE FINAL, (type aircraft). OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY (number), (type aircraft). OPPOSITE DIRECTION TRAFFIC, (position), (type aircraft).*

4. Require the use of a memory aid.

5. Contain the following minimum coordination requirements:

(a) Define the facility/position that is responsible for initiating coordination.

(b) All coordination must be on a recorded line and state “Opposite Direction.” Initial coordination must include call sign, type, and arrival or departure runway.

(c) At those locations that routinely conduct Opposite Direction Operations due to noise abatement at night and when issued a Letter of Authorization by the Service Area Director of Operations, the provisions of paragraph e5 above are not required.

f. For VFR aircraft that are conducting opposite direction operations to same or parallel runways, facility directives must contain procedures requiring the use of the following, including but not limited to:

1. Ensuring departing VFR aircraft are issued a turn to avoid conflict with opposing IFR/VFR traffic.
2. Traffic advisories to both aircraft.
3. State the phrase “opposite direction” if coordination is required.

4. Memory Aids.

g. All facility directives and letters of agreement addressing opposite direction operations must be approved by the Service Area Director of Operations.

**REFERENCE—**  
FAA Order JO 7110.65, Para 3-8-4, Simultaneous Opposite Direction Operation.

## 2-1-37. SPECIAL INTEREST SITES

a. Supervisory/CIC personnel receiving any reports or information regarding unusual aircraft activities in the vicinity of special interest sites such as nuclear power plants, power plants, dams, refineries, etc., must immediately notify local law enforcement authorities of these reports/information and notify the overlying air traffic facility of any of these reports and the action taken. Supervisory/CIC personnel may receive reports/information from the Nuclear Regulatory Commission or other sources.

b. Air traffic facilities must promptly advise the Domestic Events Network (DEN) of any actions taken in accordance with this paragraph.

c. Individual facilities must determine which special interest sites, if any, should be displayed on maps, charts, and video displays.

## 2-1-38. TRANSPORTATION SECURITY ADMINISTRATION AND FAA JOINT OPERATING PROCEDURES

The requirements for Air Traffic Managers (ATM) to follow during security events, according to the Transportation Security Administration (TSA) and the FAA Joint Operating Procedures Agreement, are as follows:

a. If the TSA Federal Security Director (FSD) informs the ATM of an imminent and potentially life threatening security situation, the ATM, consistent with safety, must comply with the FSD’s requested operational response. As soon as possible after action is taken, the ATM must contact the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC) and report any action taken.

b. The above guidance does not preclude the ATM from taking immediate action in the event the ATM learns of an imminent and potentially life threatening security situation. In such situations, as soon as possible, the ATM must notify the DEN ATSC and the FSD of the situation, along with any action taken.

**NOTE—**

*For information concerning reporting of suspicious activities around airports and FAA facilities, see JO 7210.3, paragraph 2–7–6, Suspicious Activities Around Airports or FAA Facilities.*

c. For any security situation identified by TSA, in addition to those that are “imminent and life threatening,” the ATM must contact the DEN ATSC and the FSD to report the situation.

d. At airports that have both an FAA and TSA presence, the ATM and FSD must meet at least every 6 months, or within sixty days of a new ATM or FSD entering into their position, to exchange/update contact information and to discuss security-related information and plans of mutual interest.

e. The responsibilities outlined in this paragraph may be delegated as necessary.

## **2–1–39. DISPLAYING SPACE LAUNCH AND REENTRY AREAS ON THE SITUATION DISPLAY**

Facility ATMs must develop a means to ensure that volumes of airspace depicted on an operational situation display for space launch and reentry operations are verified to be accurate.

## 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 must 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 must not be used as a basis for initiating disciplinary action.

### 2-2-2. JOB REQUIREMENTS

Each person must 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, must supervise and assist in training other specialists as appropriate.

### 2-2-3. POSITION RESPONSIBILITY

a. 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.*

b. Anytime an operational area is operated with one air traffic control specialist (ATCS), the following procedure must be followed: Prior to leaving the operational area, for any reason, the ATCS must advise all applicable facilities (tower, approach control, and/or center) that they are leaving the operational area and must advise the same facility/facilities upon return. Leaving the operational area should only be done during periods when the controller is not responsible for any aircraft.

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

a. Air traffic managers must determine which sectors or positions require “duty familiarization” for each shift and must 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. All operational personnel, with the exception of Flight Service Specialists, prior to working their first control position of the duty day, must view and listen to the recorded Center Weather Service Unit (CWSU) briefing, when available.

1. ATMs must designate, through a facility directive, the procedures to have CWSU recorded weather briefings available for viewing and listening by operational personnel.

2. Viewing this briefing does not eliminate the responsibility to get a complete position relief briefing (including weather) when assuming a control position.

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

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. Checklists must be reviewed annually to ensure the sector/position checklist items are current.

(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, such as the Aeronautical Information System Replacement (AISR), must designate those systems as the primary source of NOTAM information.*

- (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, must be the first item listed on the position checklist.

(d) When traffic is included on the position checklist, it must 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.

(12) UAS activity of operational importance.

(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.

d. To the maximum extent practicable the position relief briefing must be recorded.

e. Specialists manning the positions identified under subparagraph 2–2–4b, requiring the mainten-



ance of operational continuity, must conduct a position relief briefing in accordance with FAA Order JO 7110.65, Air Traffic Control, Appendix A, Standard Operating Practice (SOP) for the Transfer of Position Responsibility, or FAA Order JO 7110.10, Flight Services, paragraph 1–3–3, Duty Familiarization and Transfer of Position Responsibility.

**f. Responsibilities:**

**1.** The specialist being relieved must 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 must 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 must 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 must 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 must 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 must 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/ERAM/NTML/FSS or other Agency or local programs. Facilities may use Common ARTS/ERAM/NTML/FSS 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)/operations supervisor (OS)/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 must ensure that procedures are in place so that operational schedules are entered correctly into ART.

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

**(a)** Sign in for a shift must 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 must 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 must 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/OS/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/OS/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," must be used to indicate position responsibility. When the ART system has been restored or the facility reoccupied, the facility must 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 must be retained in accordance with document retention guidance.

b. The Cru–X/ART electronic logs must 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 must then enter that time into Cru–X/ART.

**2–2–7. CIRNOT HANDLING**

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

a. WMSCR/NNCC must maintain a record of all CIRNOTs and forward a hard copy to the appropriate Service Area Director of Air Traffic Operations by the most expeditious means available.

b. FSS air traffic managers must provide CIRNOTs to the appropriate Service Area Director of Air Traffic Operations 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 General Notice (GENOT) is issued by headquarters ATO organizations via the Washington Operations Center (WOC) and is transmitted to all FAA and contract air traffic facilities via Aeronautical Information System–Replacement (AIS–R).

a. Facility ATMs must establish local procedures to ensure AIS–R, or equivalent Service B message provider via NADIN/NMR, is checked at least daily for new GENOTs.

b. Upon receipt, facility ATMs must:

1. Determine if the content of the GENOT is applicable to their facility.
2. Ensure required information is briefed to employees prior to performing operational duties.

**NOTE–**

*Managers should update employee's Training and Proficiency Record in accordance with FAA Order JO 3120.4, Air Traffic Technical Training.*

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

**a.** The Policy Directorate is the ATO authority on all matters pertaining to Air Traffic Procedures; hence, the development of an Air Traffic Procedures Bulletin (ATPB).

**b.** The ATPB is:

**1.** A tool that the Policy Directorate utilizes to share additional Air Traffic Procedures information with field facilities.

**2.** Published on an *as needed basis*, to provide additional clarity or to communicate useful information concerning the proper application of air traffic standards, policies, and procedures.

**3.** Is effective for one year from its publication date. The Policy Directorate may extend a bulletin's expiration date to accommodate topics that are still current.

**c.** While this list is not all inclusive, the ATPB can be used to:

**1.** Respond to field facility questions or concerns that are typically generated with the establishment of new separation minima.

**2.** Address the misapplication of existing procedures as identified through a Safety Assurance Program (e.g., internal/external audit).

**3.** Address safety recommendations received from any safety related program or organization (e.g., Runway Safety, ATSAP, AJI, AOV, and NTSB).

**4.** Communicate the need for changing air traffic procedures based on a pressing safety need (risk mitigation).

**5.** Communicate the development of new air traffic procedures associated with the deployment of new technologies.

**d.** Facility Air Traffic Managers must:

**1.** Ensure that their facility is on the distribution list for the Air Traffic Procedures Bulletin. Any

corrections, additions or deletions should be directed through the appropriate Service Center.

**2.** Ensure that ATPB items that are appropriate to a particular facility are verbally briefed with facility personnel.

**(a)** The Policy Directorate will annotate the ATPB with the type of facilities that the subjects are applicable to.

**(b)** These briefings must take place within 45 days after receipt of the bulletin. Record briefings in accordance with FAA Order 3120.4, Appendix A.

**3.** Encourage submissions of suggested ATPB items that have an operational or procedural impact from facility personnel at regular crew and personnel briefings.

**(a)** Evaluate and forward those suggestions considered appropriate for Service Area office review.

**(b)** Service Center offices must evaluate the suggested items and forward those considered significant and/or national in scope to the Policy Directorate via the electronic mailbox at 9-AJV-P-HQ-Correspondence@faa.gov, in *Microsoft Word* format.

## **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 must ensure that such information is safeguarded from disclosure in accordance with FAA Order 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 ORDERS, PUBLISHED AERONAUTICAL DATA, AND FLIGHT PROCEDURES

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

b. Air traffic managers must ensure that facility air traffic personnel are briefed prior to implementation on changes identified in the review of published aeronautical data and flight procedures that have operational/procedural significance or will likely have an effect on their facility's air traffic services. To the extent possible these briefings should be initiated within 30 days prior to the date of the change.

### REFERENCE-

FAA Order JO 7210.3, Para 2-1-6, *Checking Accuracy of Published Data*

c. The Aeronautical Information System Replacement (AISR) is an authorized source for NOTAMs. To the extent available, Air Traffic Managers must permit review of AISR for NOTAMs impacting the facility's area of jurisdiction, or an alternative authorized source; for example, the National Airspace System Aeronautical Information Management Enterprise System (FAA NAIMES) website at: <https://notams.aim.faa.gov/notamSearch>.

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

Air traffic facility managers must determine which VSCS console equipment (VCE) positions require tailored checklists. The checklist must 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 Control Center 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 must apply: Trouble reports must 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 must be specified.

### EXAMPLE-

*"Atlanta Sector 66R side 123.4 no transmit."*

b. For air/ground communications problems, the calling and the called locations must 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:

## Section 5. Watch Coverage–Flight Service Stations

### 2-5-1. BASIC WATCH SCHEDULES

a. Facility air traffic managers are responsible for preparing watch schedules for their facilities. These schedules must take into account normal traffic flow thereby permitting the posting of a continuing rotational schedule for an indefinite period of time. Facility management is responsible for appropriate consultation with local unions.

b. Facility air traffic managers must, to the maximum extent possible, establish overlapping shifts thereby providing an opportunity for personnel to accomplish a majority of briefings without need for overtime assignment.

c. Facility air traffic managers must ensure that air traffic control specialists (ATCS) assigned to a position of operation:

1. Do not work more than 6 consecutive days.
2. Do not work more than a 10-hour day.
3. Have an off-duty period of at least 8 hours between watches.

### 2-5-2. DESIGNATING WATCH SUPERVISION COVERAGE

a. Efficient air traffic services require supervision of each watch regardless of the number of people assigned.

b. At facilities where a specialist stands a watch alone, responsibility for the overall operation of the facility during the watch becomes a part of his/her duties.

c. When two or more specialists are on duty and no supervisory personnel are available (see Note), one specialist who is fully qualified and rated in the assigned operational area must be designated by the facility air traffic manager as CIC/DLS for that watch. Specialists so designated may be required to perform specialist duties in addition to those associated with watch supervision. The CIC/DLS designation must be rotated among qualified specialists. Persons so designated perform the full range of duties associated with watch supervision. Watch supervision by itself does not justify a higher

grade; i.e., the CIC/DLS does not perform supervisory duties, such as:

1. Evaluating employee performance.
2. Recommending selections, promotions, awards, disciplinary actions, and separations.
3. Explaining and gaining support of employees for management policies and goals.
4. Counseling employees on their performance ratings.
5. Monitoring presidential aircraft movement.

#### NOTE–

*A supervisor 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 supervisory function. If the supervisor leaves the operational area or is engaged in an activity which may interfere with or preclude the performance of watch supervision duties, then a CIC/DLS must be designated.*

### 2-5-3. AREA SUPERVISION

OSs primary function is the supervision of their area and assistance to specialists. It is particularly important that supervisors carefully monitor current and anticipated sector activity to ensure that available controller staffing is deployed at optimal efficiency. Managers/supervisors must be responsible for managing the operational environment with a goal toward eliminating distractions in the operational environment. Managers must, to the extent practicable, avoid scheduling supervisors for nonoperational duties during periods of known heavy traffic.

### 2-5-4. RELIEF PERIODS

a. Facility air traffic managers must use all available qualified personnel to provide relief periods. First priority should be given to providing a reasonable amount of time away from the position of operation for meals. Additionally, time for such things as briefings and training should be made by rotating work assignments among qualified employees.

b. Supervisors in charge are responsible for knowing the whereabouts of employees to ensure their operational availability. Supervisors are also responsible for ensuring that relief periods are

applied in such a manner as to maximize the usage of personnel and to promote the efficiency of the agency.

c. Relief period, i.e., break, is defined by the Comptroller General as being a “brief” rest period that may be assigned by the agency. While no specific timeframe is placed on the duration of relief periods, supervisors and managers will be held accountable to ensure that breaks are of a reasonable duration.

d. Supervisors must not condone or permit individuals to sleep while on duty. Any such instance must be handled in accordance with Human Resource Policy Manual (HRPM), Standards of Conduct, or applicable corporate policy (for FCFSS contract facilities).

### **2-5-5. OVERTIME DUTY**

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

### **2-5-6. HOLIDAY STAFFING**

a. Facility air traffic managers must 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 must:

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.

### **2-5-7. CONSOLIDATING POSITIONS**

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.

### **2-5-8. SUPERVISORS HOURS OF DUTY (ALASKA ONLY)**

Hours of duty of facility air traffic managers and administrative staffs should conform with the duty hours of the Alaska Flight Service Information Area Group.

### **2-5-9. FACILITY COMPLEMENTS (ALASKA ONLY)**

Facility air traffic managers will be informed by the Alaska Flight Service Information Area Group 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.

### **2-5-10. CONTROLLER-IN-CHARGE (CIC)/DESIGNATED LEAD SPECIALIST (DLS) TRAINING**

a. Prior to being designated as CIC/DLS, specialists must have been facility/area rated/certified for 6 months, except as provided in paragraph 2-6-3c. The specialist must also have completed an agency-approved and established CIC/DLS training course for Flight Service (Alaska) or Federal Contract Flight Service Stations (FCFSS). The Director of Flight Service may issue a facility waiver for the 6 months criteria where a more immediate assignment is indicated. Upon receipt of a waiver from the Director of Flight Services, the facility manager can then issue individual waivers to the 6 months requirement on a case-by-case basis. Waivers to facilities will be for 1 year with renewals based on the result of a yearly evaluation by the region.

#### **NOTE-**

*In facilities that use CICs/DLSs to provide midwatch coverage, all facility/area rated/certified specialists that provide such coverage must complete an agency-approved and established CIC/DLS training course for Flight Service as described above, within 30 days of final certification/rating.*

b. Specialists that have completed the CIC/DLS course, have performed such duties, and subsequently transfer to another facility, must be required to complete those portions of the course that are specific to the new facility before assuming CIC/DLS duties,

except as provided in paragraph 2–6–3. They must not be required to fulfill the 6 months experience requirement at the new facility.

c. Upon completion of the CIC/DLS course, record an entry noting this in the specialist's Training and Proficiency Record, FAA Form 3120–1, section 3 or electronic equivalent; or the FCFSS equivalent.





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 (ATM) must ensure, to the maximum extent possible, that these functions are not normally consolidated during non-midwatch operations.

**b.** The ATM must stipulate, in a facility directive, procedures for consolidating approach control functions in the tower cab. The directive, at a minimum, must address:

**1.** When it is appropriate to permit the consolidation of operations to the tower cab,

**2.** Required upward reporting to the General Manager during non-midwatch operations,

**c.** At those locations with only one certified tower radar display (CTRD) in the tower cab, the facility directive must also address radar separation responsibilities, and other issues inherent in operations conducted with one CTRD in the tower cab.

**d.** During midwatch operations (where the majority of hours fall between 10:30 p.m. and 6:30 a.m.) when traffic permits, all functions may be consolidated for meals or breaks.

**e.** Air traffic managers must ensure that no less than two fully-certified and current operational

personnel are assigned to midnight shift, unless no such personnel are available for assignment.

## **2-6-13. SINGLE PERSON MIDNIGHT OPERATIONS**

**a.** In order to ensure that a receiving controller is prepared to accept an aircraft, coordination between facilities/operational areas must be accomplished either manually via landline, or positively acknowledged via automation, (for example, acceptance of the handoff by keystroke entry), when an operational area is operated with one ATCS between the hours of 0000L to 0500L.

**1.** Coordination procedures during the time period defined in paragraph a can be suspended during periods of increased of traffic. An increase of traffic may include, but is not limited to, the following:

**(a)** Late night SWAP events.

**(b)** Military movement/exercises.

**(c)** Multiple arrivals/departures in a short period of time.

**2.** The coordination procedures do not supersede existing requirements in FAA Order JO 7110.65.

**3.** Facilities must have local procedures to be used during the hours identified above. Such procedures are to be placed into local SOP or LOAs between facilities.

### **NOTE-**

*Automated coordination cannot be hand-offs that do not include human interaction.*

**b.** In the event there is no response from the facility/operational area with which coordination is attempted, immediate action must be taken to determine the status of the unresponsive controller and begin appropriate notification.

**c.** When operations permit, it is expected that functions will be consolidated to facilitate breaks in up/down facilities during midnight shifts.



## Section 7. Appearance and Security

### 2-7-1. PERSONNEL APPEARANCE

Personnel must maintain a neat, clean, businesslike appearance during working hours. Personal grooming and clothing must be appropriate to the conduct of Government business.

### 2-7-2. QUARTERS APPEARANCE

The appearance of each air traffic facility must reflect the high standards of the agency at all times. Facility air traffic managers must ensure that adequate janitorial services are provided.

### 2-7-3. BULLETIN BOARDS

Air traffic bulletin boards should only display material authorized by the facility air traffic manager or his/her designee.

### 2-7-4. FOOD AND BEVERAGES

Food and beverages may be permitted in the operating quarters at the discretion of the facility air traffic manager.

### 2-7-5. FACILITY SECURITY

a. Facility air traffic managers are responsible for the security of operating quarters and must use appropriate agency directives for guidance in maintaining this security. This is not applicable to pilot briefing areas in flight service stations.

b. Facility air traffic managers must determine that adequate locks or other suitable devices are installed and operated so as to ensure security control over access to operating quarters.

c. In no case must ARTCC buildings be used as public fallout shelters.

### 2-7-6. SUSPICIOUS ACTIVITIES AROUND AIRPORTS OR FAA FACILITIES

ATC facilities must report suspicious activities (for example, unauthorized use of aircraft, tampering with aircraft or other property around airports or FAA facilities, placing packages or other objects in unusual locations, and any activity performed in a

manner that is suspect of malice) on the Domestic Events Network (DEN) at 844-432-2962 (toll-free). In addition, these types of suspicious activities must be reported to local law enforcement, the airport manager, aircraft operator, or any combination thereof as appropriate. Do not attempt to delay, detain, or question suspects, but do attempt to keep the person or persons under surveillance until law enforcement representatives arrive.

#### NOTE-

*Procedures for reporting other suspicious activities or security events are located in JO 7210.3, paragraphs 2-1-30, Reporting Suspicious Aircraft/Pilot Activities; 2-1-32, Reporting Suspicious UAS Activities; 2-1-38, Transportation Security Administration and FAA Joint Operating Procedures; and 2-7-7, Cooperation with Law Enforcement Agencies.*

### 2-7-7. COOPERATION WITH LAW ENFORCEMENT AGENCIES

a. Theft of aircraft and other suspicious activities concerning aircraft have complicated the task of law enforcement agencies, particularly with federal drug enforcement efforts. Any information the Federal Bureau of Investigation (FBI) and Department of Homeland Security (DHS) obtains on these activities could assist their investigations. ATC facilities must report information pertaining to stolen aircraft and other suspicious activities concerning aircraft on the Domestic Events Network (DEN) as described in subparagraph c.

#### REFERENCE-

*FAA Order JO 7210.3, Para 2-7-6, Suspicious Activities Around Airports or FAA Facilities.*

b. The Blue Lightning Initiative, led by U.S. Customs and Border Protection and the Department of Transportation, trains airline personnel to identify potential traffickers and human trafficking victims, and to report their suspicions to federal law enforcement. Reports of suspected human trafficking must be reported on the DEN as described in subparagraph c.

c. Report on the DEN directly if the ATC facility is actively monitoring the DEN or has a dedicated line to the DEN. Otherwise, the ATC facility must immediately report the above referenced activities on the DEN via 844-432-2962 (toll free).

**2-7-8. FACILITY VISITORS**

**a.** Persons interested in the services and facilities provided by air traffic should be encouraged to visit facilities for familiarization. The facility air traffic manager or a designated representative may authorize these visits if:

- 1.** The presence of visitors does not interfere with the operation of the facility.
- 2.** There is no breach of security directives.

**3.** Personnel are or will be available to conduct an escorted tour.

**b.** Foreign national visits must be handled in accordance with current directives.

**2-7-9. SECURITY OF JOINT-USE RADAR DATA**

Personnel involved in a joint-use radar environment must be familiar with the provisions of directives concerning the security of joint-use radar.

# Chapter 3. Facility Equipment

## Section 1. General

### 3-1-1. BASIC EQUIPMENT

a. The basic operating equipment for ARTCCs consists of flight progress boards, radar displays, communications, and automation equipment. At facilities utilizing ATOP, additional equipment consists of Air Traffic Situation Displays and Auxiliary Displays. This equipment is arranged in individual units called sectors and laid out in accordance with master plans maintained in the En Route and Oceanic Service Area offices. Air traffic managers may recommend changes to these plans.

b. The basic operating equipment for terminals consists of a control desk, frequency control panel, weather instruments, recorders and, as required, "data communication," radar, and automation equipment arranged in many different configurations according to the type of facility and generally conforming to master plans maintained in Terminal Service Area offices. Air traffic managers may recommend changes to these plans.

1. At terminal facilities where certified information display system (IDS) equipment is installed, the IDS must be the display source for the time, DASI, RVR, wind (including wind shear ribbon display terminals), and weather data from ASOS, AWOS, SAWS, SWS, etc.

2. If all control positions are using a certified IDS, no more than one legacy display for each type (DASI, RVR, etc.) may remain in the tower and/or TRACON for back-up purposes.

3. Facilities that use uncertified IDS must ensure the information is cross-checked with the actual source for accuracy in accordance with the facility's daily watch checklist (for example, ASOS, RVR, LLWAS, etc.).

**NOTE-**

*For facilities using certified systems, these comparisons are performed by technical operations personnel.*

4. Air traffic facilities that use electronic IDS must ensure that all displayed information is current. Facilities must ensure that any information with a scheduled expiration is removed from the controller

display at the time of expiration. If the system is capable of automatically removing expired information, it must be configured to do so.

**NOTE-**

*This includes Notice to Air Missions (NOTAM) information which may be viewed on the Aeronautical Information System Replacement (AISR) or at: <https://notams.aim.faa.gov/notamSearch>.*

c. The basic operating equipment for FSSs consists of radio and landline communications equipment, flight progress boards (or electronic equivalent), pilot briefing equipment, recorders, data communications equipment, displays of aeronautical and meteorological information, and aircraft orientation plotting boards (or electronic equivalent). Air traffic managers may recommend changes to these plans.

### 3-1-2. PERIODIC MAINTENANCE

a. Requests from Technical Operations personnel for approval to shut down air traffic system components for periodic maintenance are forwarded to the air traffic facility having approval authority.

b. If conditions prevent approval of the shutdown at the time requested, the OMIC/OSIC should cooperate fully and work with Technical Operations personnel in arranging an alternative time. Ordinarily, shutdowns of air traffic system components should be planned to occur during the hours of least traffic activity regardless of the time of day.

**NOTE-**

*The OMIC/OSIC should coordinate with System Operations Traffic Management in determining alternate times.*

c. When a NAVAID shutdown will affect another facility's operation, the facility having approval authority must coordinate with other facilities concerned.

### 3-1-3. NATIONAL AIRSPACE SYSTEM (NAS) CHANGES

When programs are initiated which will result in inauguration, commissioning, alteration, or decom-

missioning of NAS components (NAVAIDs, facilities, services, etc.), supervisors must ensure, to the extent practicable, that effective dates coincide with the U.S. 56-day cycle effective dates for charting publications.

### **3-1-4. TRAFFIC LIGHTS, GATES, AND SIGNALS**

Air traffic personnel must not operate traffic lights, gates, signals, or similar devices for restricting or preventing transit of persons or vehicles between airport movement areas and other on/off airport areas, or to control vehicular traffic on streets, highways, rail, or other similar areas when traffic thereon may be incompatible with aircraft operations. The control of such traffic is the responsibility of airport management or other appropriate authorities.

### **3-1-5. CLEANING INSTRUMENT COVERS**

Air traffic managers must ensure that personnel use a moist cloth when cleaning glass or plastic instrument covers to preclude the creation of static charges.

#### **NOTE-**

*FSS OASIS facilities should exercise caution in the handling of flat panel monitors. Do not touch the screen with any object, including hands. Damage to the screen will occur. Detailed instructions for the care of the monitors can be found in the WINGS Systems Users Guide.*

### **3-1-6. ENGINE GENERATOR TRANSFER PROCEDURES FOR ANTICIPATED POWER FAILURE**

a. STMCIC or OSIC at terminal facilities and ARTCCs must inform the systems engineer (SE) or other appropriate Technical Operations supervisor of any severe storm activity approaching the facility. The STMCIC or OSIC must advise the OMIC.

b. At facilities without an operational power conditioning system (PCS), the STMCIC or OSIC must coordinate with the SE or other appropriate Technical Operations supervisor to determine a mutually acceptable time to change to/from generator power.

#### **NOTE-**

*1. Air traffic and Technical Operations personnel are required to monitor weather reports and radar to determine when severe storm activity is approaching a facility. At least 30 minutes prior to the estimated arrival of a severe storm in the area of a facility, maintenance personnel will start engine generators at facilities as indicated in appropriate agency directives. (These include the Facilities Master File; FAA Order JO 6030.31, National Airspace System Failure Response; local contingency/emergency plans, or any other directives pertaining to restoration of services.) This 30-minute start-up requirement does not apply at facilities where at least one of the following conditions exists:*

*a. The facility has an operational PCS.*

*b. Maintenance personnel are not on duty at the time action is required.*

*c. Air traffic has remote control of the engine generators.*

*2. After coordinating with air traffic, Technical Operations must (depending on the type of auxiliary power system) either place the facility on generator power or place the generator on the loadbank until the storm activity has left the area. (The change back to commercial power will be made at the coordinated time.)*

*3. It is important to note that at facilities with an operational PCS, no action other than the initial storm notification is required since the transfer to generator power occurs automatically with no power interruption when commercial power fails.*

#### **REFERENCE-**

*FAA Order JO 6030.31, National Airspace System Failure Response.*

## Section 4. Recorders

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

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

**b.** Air traffic facilities must record emergency response notifications by telephone or communication lines to the maximum extent practicable.

**c.** 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 must advise operating positions when the recording equipment associated with these positions is not operating or otherwise unavailable for recording. Facility management must then ensure that a written record, or equivalent, to the extent possible, is made for all IFR clearances.

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

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

**f.** 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.

**g.** Operational voice recorders must be provided a time source.

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

**i.** Reserve one channel of each recorder for recording time; except two channels must 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.

**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 must 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 45 days if a recorded channel is not available.

**3. FSSs:**

- (a) Inflight.
- (b) Preflight.
- (c) Flight data.
- (d) 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 RECORDING 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) FAA Order JO 6670.4, *Maintenance of Multichannel Recorder Equipment*,

or

(Digital) FAA Order JO 6670.13, *Maintenance of Digital Voice Recorder (DVR) Equipment* and FAA Order 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.

3. At Federal Contract Flight Service Stations, engineering staff will monitor the operational status of all audio recording equipment.

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 FAA Order 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. Accidents: Retain the tapes, DATs, or DALRs in accordance with FAA Order JO 8020.16, *Aircraft Accident and Incident Notification, Investigation and Reporting*.

2. Incidents: Retain the tapes, DATs, or DALRs in accordance with FAA Order JO 8020.16, *Aircraft*



Accident and Incident Notification, Investigation, and Reporting; and FAA Order 1350.14, Records Management.

**3. 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.

**4. Tarmac Delay:** When a facility is notified that an aircraft has or may have exceeded the “Three/Four-Hour Tarmac Rule,” retain voice recordings relevant to the event for 1 year.

### **3–4–5. VSCS DATA RETENTION**

**a.** Retain the VSCS disc, tape recordings, and data communications printouts for 45 days unless they are related to an accident/incident as defined in accordance with the FAA Records Disposition Reference Table supporting FAA Order 1350.14, Records Management.

**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 must be retained in accordance with aircraft accident/incident retention requirements. Reduction of the VSCS cassette, disc, and tape recordings to hard-copy format must 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 must 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 must be retained in its entirety.

**d.** Treat the VSCS cassette, disc, tape, duplicate originals, and data communications printouts related to hijack aircraft the same as voice recorder tapes. (See paragraph 3–4–4, Handling Recorder Tapes or DATs, or DALR Storage).



## Section 6. Surveillance Source Use

### 3-6-1. COMMISSIONING RADAR FACILITIES

#### a. Electronic Commissioning:

1. Subsequent to the initial installation of an ARSR/ASR system, the provisions of FAA Order 8200.1, United States Standard Flight Inspection Manual, paragraph 215 must be satisfied prior to the electronic commissioning of the facility.

2. Major equipment modifications or major component changes to existing installations may necessitate a special flight check to reaffirm that the radar is continuing to meet the original commissioning criteria. When such a change is made, the new type equipment must be electronically commissioned in accordance with subparagraph 1 above.

3. If ASR equipment cannot meet the surveillance approach requirement during the flight check, consider this phase of the flight check as secondary and commission the equipment for its primary purpose of providing radar traffic control service.

#### b. Operational Implementation:

1. When a radar facility is to be commissioned, a 60-day period of use (without the application of radar separation standards) should elapse between the electronic commissioning date and the inauguration of radar air traffic control service. This period will permit controllers to gain experience in tracking, vectoring, and identification. It will better ensure a full understanding of the equipment, procedures, and services to be provided. However, this 60-day period is not mandatory and may be reduced or eliminated provided NOTAM requirements can be satisfied and the Service Area office is assured that the intended service can be carried out in a safe and efficient manner.

2. Only one phase of service should be implemented at a time. A period of 30 to 60 days should elapse between the implementation of subsequent phases. For example, ARTCCs may initiate en route service on specific routes or within specified areas; terminals may implement either arrival or departure service 30 to 60 days prior to expanding to other areas/services. Advertised services must be implemented on an all-aircraft basis

and must be accomplished in accordance with FAA Order JO 7110.65, Air Traffic Control. If services are initially implemented on a "part-time" basis, the daily hours (preferably 8 hours or longer) must be specified in the aeronautical information message and the advertised services maintained during those hours. The extent and types of service will be dependent upon operational requirements, personnel, and equipment capabilities. The schedule of radar service implementation must be jointly determined by the facility air traffic manager and the Service Area office. Service Area office approval is required prior to the implementation of each phase of radar service.

3. A review of the existing LOA must be accomplished to ensure that necessary changes are made or that new agreements are consummated and approved prior to implementing any phase of radar traffic control. Airspace areas for which radar terminal facilities have responsibility should include sufficient vector areas for:

(a) Positioning and spacing of arriving aircraft en route to the airport from outer fixes or radar handoff points.

#### NOTE-

*Normally, no less than two nor more than four outer fixes are used to serve a single approach course. These fixes are normally located to permit simultaneous holding at the same altitude. When only one radar approach control position is used, two outer fixes are optimum. If two radar approach positions are available, four fixes are optimum.*

(b) Spacing and control of departing aircraft and aircraft executing missed approaches.

(c) Positioning and spacing transitioning aircraft.

#### c. Notification Procedures:

1. Issue an aeronautical information message for each location at least 30 days prior to and again immediately following implementation of radar ATC procedures containing the following:

(a) Nature of service; e.g., departure, arrival, en route.

(b) Proposed or effective date.

(c) Specific airspace affected.

(d) Hours of service if less than 24 hours per day.

**EXAMPLE–**

*BAKERSFIELD, CALIFORNIA, SURVEILLANCE RADAR EXPECTED TO BE COMMISSIONED ON OR ABOUT JUNE 15, 2004. RADAR AIR TRAFFIC CONTROL SERVICE USING RADAR SEPARATION STANDARDS WILL BE APPLIED AS APPROPRIATE. SERVICE WILL BE PROVIDED DAILY BETWEEN THE HOURS OF 1400–2300Z WITHIN 40–MILE RADIUS OF BAKERSFIELD.*

2. When an additional service is to be implemented or a change in programmed areas of application is made, issue an aeronautical information message delineating that new service. Advance notice is desirable. However, it is not mandatory, and the aeronautical information message may be issued concurrently with the inauguration of the extended radar service.

3. When a change in ARSR/ASR equipment is made, issue an aeronautical information message if a modification to existing service will result and/or if a break in service of more than 30 minutes will occur.

4. A copy of each memorandum/aeronautical information message for inclusion in the Domestic Notices website must be sent to Mission Support Services, Policy, Publications and Administration (AJV-P12) via 9-ATOR-HQ-PubGrp@faa.gov, Manager, Flight Service Safety and Operations Policy Group (AJR-B100) via 9-AJR-FSSOG@faa.gov, Aeronautical Information Services (AJV-A) via <https://nfdc.faa.gov/nfdcApps/controllers/PublicSecurity/nfdcLogin>, and the appropriate Service Area Directors.

### **3-6-2. ATC SURVEILLANCE SOURCE USE**

a. Surveillance sources that are approved for ATC use are Primary Radar, Secondary Radar, ADS-B and WAM. Approved ATC Surveillance Sources may be used for:

1. Surveillance of aircraft to assure the effective use of airspace.
2. Vectoring aircraft to provide separation and radar navigation.
3. Vectoring aircraft to final approach.
4. Vectoring IFR aircraft to the airport of intended landing.
5. Monitoring instrument approaches.

6. Providing radar traffic, weather, chaff, and bird activity information.

7. Providing assistance to pilots of aircraft in distress.

b. Approved terminal ATC Surveillance Sources may also be used for:

1. Conducting precision or surveillance approaches.

2. Formulation of clearances and control instructions based on runways and movement areas observable on the ASDE.

**NOTE–**

*In accordance with FAA Order JO 7110.65, Chapter 3, Airport Traffic Control – Terminal, Section 6, Airport Surface Detection Procedures.*

c. Targets derived from WAM may not be used to provide 3 mile separation in the En Route Automation System (EAS).

**NOTE–**

*3 NM targets are not derived from WAM within the EAS.*

### **3-6-3. MONITORING OF MODE 3/A RADAR BEACON CODES**

a. Facility air traffic managers may assign Mode 3/A codes to be monitored in addition to those required by FAA Order JO 7110.65, Air Traffic Control, Chapter 5, Section 2, Beacon Systems.

b. A facility directive must be issued establishing facility standards for displaying required transponder replies in all available operational modes.

c. Where desirable, beacon targets may be displaced at a slightly greater range than their respective primary returns. When beacon displacement is elected, issue a facility directive specifying the standard relationship between primary returns and the beacon control slash of secondary returns. The maximum allowable beacon target displacement which may be specified by the facility air traffic manager is 1/4 mile for STARS and 1/2 mile applied in 1/4 mile increments for all other facilities.

### **3-6-4. RADAR TARGET SIZING**

a. Minimum target size for terminal radar systems using terminal digital radar or full digital target symbols, except for MEARTS, must not be less than the minimum target size shown in Technical Operations' orders concerning the maintenance of

terminal digital radar. The target symbol must be centered on the terminal digital radar/full digital system type target presentation.

**NOTE–**

*Target size is fixed in MEARTS regardless of range or data block character size.*

**b.** When operating in FUSION, the minimum target size for Precision Approach Monitor (PAM) operations and for the normal use of tower radar displays is 1,200 feet. The target symbol must be centered on the terminal digital radar/full digital system type target presentation.

**NOTE–**

*Increased separation required (ISR) will be required for aircraft outside the range for PAM or other normal use of certified tower radar displays.*

### 3-6-5. TERMINAL DIGITAL RADAR SYSTEM AND DISPLAY SETTINGS

**a.** The following system settings for the terminal digital radar/DVCP must be established in a facility directive.

**1.** Normal weather setting positions when 2-level weather is selected on the system control panel.

**2.** MEARTS normal weather setting positions when 3-level weather is selected on the system control panel.

**3.** Normal weather setting positions when 6-level weather is selected on the system control panel.

**4.** Name, range/azimuth, altitude, and coordinates of prominent obstructions.

**5.** Azimuth and range settings of moving target indicator (MTI) reflectors used for map alignment.

**6.** Position Adjustable Range Reference Orientation Transponders (PARROT) used for map alignment location. Not applicable to a Digital Terminal Automation System (DTAS).

**b.** The following display settings must be established in a facility directive, except for MEARTS:

**1.** Weather/Radar Gate normal setting.

**2.** Position startup weather level settings.

**c.** Facilities that utilize a digital system that does not concurrently display all levels of precipitation (ASR-8/TDX2000) must establish a procedure via facility directive that ensures periodic monitoring of all precipitation level ranges during precipitation events.

**d.** The air traffic manager and Technical Operations System Support Center (SSC) manager must prepare a local order defining the procedures needed to protect the antenna, shutdown the antenna, transfer power between high and low voltage, and transfer from one channel to another channel.

### 3-6-6. PREARRANGED COORDINATION

**a.** Air traffic managers at radar facilities must determine whether or not a clear operational benefit will result by establishing prearranged coordination procedures (P-ACP). Such procedures would allow aircraft under one controller's jurisdiction to penetrate or transit another controller's airspace in a manner that assures approved separation without individual coordination for each aircraft. When reviewing existing P-ACPs, or contemplating the establishment of these procedures, consideration must be given to airspace realignment to preclude coordination/penetration of another operational position's airspace. Prior to implementing a P-ACP, negotiations should be accomplished locally and all affected personnel must be thoroughly trained in the application of the procedures.

**b.** When P-ACPs are established, a facility directive must be published. The directive must include, as a minimum:

**1.** Requirement that the following are fully operational.

**(a)** Terminal- STARS

**(b)** En Route- SDP, FDP, and safety alert (CA, MCI, E-MSAW) processing.

**2.** Procedures to be applied in the event that prearranged coordination procedures are not practicable.

**3.** The position(s) authorized to penetrate the protected airspace of an adjacent position.

**4.** Detailed responsibilities relating to P-ACP for each position.

5. The requirement that two positions of operation cannot be authorized to penetrate each other's airspace simultaneously.

6. Controllers who penetrate another controller's airspace using P-ACP must display data block information of that controller's aircraft which must contain, at a minimum, the position symbol and altitude information.

7. Controllers who penetrate another controller's airspace using P-ACP must determine whether the lead aircraft requires wake turbulence separation behind it.

**REFERENCE–**

*FAA Order JO 7110.65, Para 5–5–4, Minima, subparagraph f.*

8. Procedures to be applied for those modes of operation when the computer fails or is shut down, the beacon fails and only primary is available, and for nonbeacon aircraft or at automated facilities aircraft without an associated full data block.

**REFERENCE–**

*FAA Order JO 7110.65, Para 5–4–10, Prearranged Coordination.*

### **3–6–7. OPERATIONAL GUIDANCE FOR FUSION**

a. During normal operations, Fusion must be the selected mode to the extent that it is operationally feasible. The terminal Air Traffic Manager, or their designee, must decide if the fusion tracker is usable.

1. If a decision is made to discontinue use of the fusion tracker at specific sectors or facility-wide, the Air Traffic Manager, or their designee, must notify

Operations – Headquarters, AJT-2, through the appropriate service area Director of Air Traffic Operations.

2. The intent of this notification is to ensure the service area Director of Air Traffic Operations, Operations-Headquarters, and the program office are aware of the operational status and are providing all capable resources to return to Fusion operations at the affected position/facility.

3. Fusion outages due to a planned radar shutdown of short duration need not be reported.

b. During radar outages, operational alternatives, or contingency plans, must be developed and included in a facility directive that address requirements when there is degradation in the Fusion environment due to sensor availability. The steps must be pre-determined and may be implemented facility-wide or sector specific.

1. Facilities should switch to single sensor mode if there are impacts to the efficiency of facility operations due to degradation in the sensor environment while operating in Fusion mode.

2. Facilities should use single sensor mode in airspace that is restricted to the use of one long-range radar which can cause anomalies (for example, stitching or target jumping). Facilities should continue to operate in single sensor mode until adequate ADS-B equipage levels are reached, an additional sensor is available, or it is determined by management that an operational advantage is gained by remaining in Fusion.

### 3-8-5. ESTABLISHING DIVERSE VECTOR AREA/S (DVA)

a. DVAs may be established at the request of the ATM at ATCT locations without published SIDs. DVA requests will be coordinated jointly with the appropriate Service Area respective OSG and Mission Support Services, Instrument Flight Procedures Group, for candidate airports within the facility's area of jurisdiction after considering and fulfilling the following steps:

1. DVAs should be considered when obstacles penetrate the airport's diverse departure obstacle clearance surface (OCS). The OCS is a 40:1 sloping surface and is intended to protect the minimum 200 feet/NM climb gradient. If there are no obstacle penetrations of this surface, then standard takeoff minimums apply, obstacle clearance requirements are satisfied, and vectoring of IFR aircraft is permitted below the MVA/MIA.

2. When the OCS is penetrated, the Instrument Flight Procedures Group procedural designer may develop an obstacle departure procedure (ODP). An ODP may consist of obstacle notes, nonstandard takeoff minimums consisting of nonstandard ceiling and visibility or climb gradient, a specified departure route, or any combination thereof. If an ODP is developed for a runway, it may be a candidate for a DVA. The ATM must determine that sufficient surveillance coverage exists for any airport with a published instrument approach and an operating control tower.

3. Where established, reduced air traffic separation from obstacles, as provided for in TERPS diverse departure criteria, can be used to vector departing IFR aircraft below the MVA/MIA.

4. To assist in determining if obstacles penetrate the 40:1 surface, ATMs may request the Instrument Flight Procedures Group or the Service Center Flight Procedures Team (FPT) to provide a graphic depiction of any departure penetrations.

5. 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.

6. If the location is not listed, query the AIS website at [http://www.faa.gov/air\\_traffic/flight\\_info/aeronav/Aero\\_Data/](http://www.faa.gov/air_traffic/flight_info/aeronav/Aero_Data/) 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.*

7. If the ATM elects to request a DVA, use the sample memorandum below as a guide (see FIG 3-8-2). 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, 290 CW 120), 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-8/9 with Mode S beacon system or ASR-11 with MSSR beacon.

- (f) Facility Hours of Operation.

FIG 3-8-2  
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> 320 CW 020	Within 18NM
ESTABLISH	KABC	17L	<b>Range of Headings</b> 140 CW 200	Within 20NM
MODIFY	KXYZ	15	<b>Isolate Penetrating Obstacle</b> 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 Instrument Flight Procedures Group through the appropriate Service Center OSG Manager.

**c.** When a DVA is established, it will be documented and provided to the facility by the Instrument Flight Procedures Group on FAA Form 8260-15D, Diverse Vector Area (DVA). The ATM must then prepare a facility directive describing procedures for vectoring IFR departures below the MVA/MIA 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 vectors are provided to aircraft below the MVA/MIA.

**3.** Not utilizing a DVA when a SID or ODP has been assigned or when following missed approaches or go-around instructions.

**d.** IFR aircraft climbing within a DVA must not be assigned an altitude restriction below the MVA/MIA, and must reach the MVA/MIA before leaving the confines of the DVA.

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

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

**REFERENCE—**

*FAA Order JO 7110.65, Para 5-6-3, Vectors Below Minimum Altitude.*



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

## Section 1. General

### 4-1-1. CORRESPONDENCE STANDARDS

Prepare and issue facility correspondence in accordance with:

a. FAA Order 1360.16, FAA Correspondence Policy, which prescribes basic correspondence standards.

b. FAA Order 1320.1, FAA Directives System, which prescribes the procedures for issuing direction and work information.

### 4-1-2. SIGNATURE

Correspondence addressed to organizations, businesses, or individuals outside FAA must be signed “Air Traffic Manager, Kenai Flight Service Station,” “Air Traffic Manager, Washington Center,” or “Air Traffic Manager, Denver Tower.” The authorized contractions for the facility names may be used on correspondence addressed to any component of FAA; e.g., “Air Traffic Manager, Fort Worth FCFSS.”

### 4-1-3. SERVICE AREA REVIEW

Forward copies of facility correspondence concerning facility operating procedures to the Service Area office; e.g., letter to airmen normally sent to pilots, airline companies, military commands or bases, and fixed-base operators. This correspondence must be reviewed and approved at the discretion of the Service Area office prior to distribution. When information sent to users includes a change in operating procedures, facilities must establish an effective date for implementing these operating procedures at least 30 days after the date of distribution unless otherwise authorized by the Service Area office.

### 4-1-4. CORRESPONDENCE REGARDING POLICY/PROCEDURES

Air traffic managers may handle correspondence dealing with matters involving operating policy or procedures directly with other agencies or services. If

the matter is not within the jurisdiction of the air traffic manager, acknowledge the correspondence and state that the answer will be prepared and forwarded by the Service Area office. Forward all pertinent background material to the Service Area office with recommendations for further handling.

### 4-1-5. IRREGULAR OPERATION

If information or correspondence is received from an aviation agency indicating an irregular operation (exclusive of policy items) by a facility, the air traffic manager must investigate and reply to the agency within 3 administrative work days of receipt. If the air traffic manager cannot investigate and prepare a reply within 3 days, or if the matter deals with policy items outside his/her purview, he/she must forward a letter of acknowledgment. Send copies of all correspondence, instructions issued to prevent recurrence, and any information on any disciplinary action taken to the service area office.

### 4-1-6. PRELIMINARY ENVIRONMENTAL REVIEW

In coordination with the Service Area Air Traffic Environmental Protection Specialist (EPS), facilities must conduct and document a preliminary environmental review of new or revised ATC procedures in accordance with FAA Order 1050.1, Environmental Impacts: Policies and Procedures and FAA Order JO 7400.2, Procedures for Handling Airspace Matters, Chapter 32, Environmental Matters, concurrent with initial airspace planning requirements. The facility's review requires the documentation necessary to determine whether the proposed procedure(s) warrant(s) a Categorical Exclusion, an Environmental Assessment, or an Environmental Impact Statement.

a. Particular attention must be made to determine whether air traffic procedures, either new or modified, will potentially impact noise sensitive areas as defined in FAA Order 1050.1, Policies and Procedures for Considering Environmental Impacts.

**b.** For air traffic modifications to procedures at or above 3,000 feet (above ground level), the current appropriate air traffic screening and modeling tools should be applied in accordance with FAA Order JO 7400.2, paragraphs 32-2-2, Environmental Review of Procedures, and 32-3-3, Environmental Screening and Modeling Tools.

**c.** Modifications to procedures below 3,000 feet (above ground level) require additional analysis. Facilities must contact the EPS for further guidance.

**d.** If the preliminary environmental review indicates that an Environmental Assessment or an Environmental Impact Statement is not required, the documentation must be retained in the facility with copies of all documentation forwarded to the EPS. The directive resulting from new or modified air traffic procedures must contain a statement that a preliminary environmental review has been completed and that a Categorical Exclusion, if applicable, as demonstrated through appropriate analysis by an EPS, has been approved by the responsible official.

## Section 3. Letters of Agreement (LOA)

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

An LOA should be negotiated if the air traffic manager deems it necessary to clarify responsibilities of other persons/facilities/organizations when specific operational/procedural needs require their cooperation and concurrence. For Class A airspace authorizations, do not negotiate an LOA intended to support recurring operations, before reviewing the guidance contained in Chapter 19 of this order regarding waivers, authorizations, or exemptions to the Code of Federal Regulations (CFR). An LOA should be prepared when it is necessary to:

- a. Supplement established operational/procedural instructions.
- b. Define responsibilities and coordination requirements.
- c. Establish or standardize operating methods.
- d. Specify special operating conditions or specific air traffic control procedures.

1. LOAs for recurring VFR glider and balloon operations in Class A airspace must contain the following provision:

“This Letter of Agreement (LOA) does not grant nor imply the waiver of, or an authorization to deviate from, any part or subpart of the Code of Federal Regulations (CFR). All applicant(s) and/or operator(s) will coordinate with the responsible Flight Standards District Office in advance of planned or recurring VFR flight in Class A airspace.”

2. The Flight Standards Service (FS) is responsible for ensuring the qualification of civil pilots, airworthiness of civil aircraft, and the safety of persons and property on the ground as part of a waiver for which air traffic does not have issuing authority. Chapter 19 of this order references CFRs that require coordination with FS for these operations to occur.

#### NOTE-

*Planned or recurring operations constitute those operations over a long period of time necessitating an LOA. Short-term periods, for example, a single day event, weekend, or similar short periods are accomplished through special provisions included with an FS approved Certificate of Waiver.*

#### REFERENCE-

*FAA Order 8900.1, Flight Standards Information Management System (FSIMS).*

e. 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.

f. Establish responsibilities for:

- 1. Operating airport equipment.
- 2. Providing emergency services.

3. Provide airport management with braking action reports. At a minimum, procedures must provide for the prompt notification which indicate runway braking conditions have deteriorated to “good to medium,” “medium,” “medium to poor,” “poor,” or “nil” or have improved to “good.”

4. Reporting operating limitations and hazards.

5. Interfacility use of trajectory-based operations (TBO) capabilities (e.g., TBFM, TFDM.)

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

#### REFERENCE-

*FAA Order JO 7110.65, Para 1-1-11, Constraints Governing Supplements and Procedural Deviations.*

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

i. Describe airspace areas required to segregate special operations.

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

k. 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 must 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 must 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 must 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 must 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."

**1.** The airport operator must define the specific activities allowed in the Runway Safety Areas (RSA) during aircraft operations. Air Traffic, FAA Technical Operations and airport tenants that may be permitted into the RSA must be included in an LOA.

#### **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: Procedures for the assignment of DVFR and VFR beacon codes.
  - 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.
    - 3.** Opposite direction operations procedures.
- REFERENCE—**  
*FAA Order 7210.3, Para 2-1-36, Opposite Direction Operations.*
- 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 “good to medium,” “medium,” “medium to poor,” “poor,” or “nil” are to be immediately transmitted to airport management, 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 150/5200–30D, Airport Winter Safety and Operations.*

**4.** Control of vehicular traffic on airport movement areas.

**5.** Specific activities allowed in the RSA during aircraft operations.

#### REFERENCE–

*FAA Order JO 7210.3, Para 2–1–22, Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas. Approach/Departure Hold Areas and Clearways.*  
*AC–150/5210–20A, Appendix C.*

**6.** 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.

**m.** Between an air traffic control facility and a fixed site operating under Section 44809. For all operations occurring on–airport, follow procedures in FAA Order JO 7200.23, Processing of Unmanned Aircraft Systems Requests, Chapter 2, Processing of Section 44809 Authorization Requests.

### 4–3–3. DEVELOPING LOA

Air traffic managers must take the following action when developing an LOA: (See examples FIG 4–3–1 and FIG 4–3–2. For commercial space example LOAs, see Appendix 6.)

**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. Review pertinent national procedures or local instrument flight procedures and incorporate into the new LOA(s) as necessary.

#### NOTE–

*Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures/](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/).*

#### REFERENCE–

*FAA Order JO 7210.3, Para 2–1–2, Facility Standard Operating Procedures Directive.*

*FAA Order JO 7210.3, Para 2–1–6, Checking Accuracy of Published Data.*

*FAA Order JO 7210.3, Para 4–3–7, Annual Review/Revisions.*

**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 must 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 FAA Order JO 7110.65, Air Traffic Control, unless appropriate military authority has authorized application of reduced separation between military aircraft; or

**REFERENCE—**  
FAA Order 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 paragraph 2-1-16, Authorization for Separation Services by Towers, and paragraph 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 must:

**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.

**EXCEPTION.** LOAs containing contingency plan information must not be posted to the FDR. LOAs with such information must be posted to the National OCP database.

**REFERENCE—**  
FAA Order JO 7210.3, Para 2-2-14, *Facility Directives Repository (FDR)*.

#### **4-3-6. COMMERCIAL SPACE LOAs**

LOAs exist between ATC facilities and commercial space launch/reentry site, launch, and/or reentry operations proponents. FAA Order JO 7400.2, Procedures for Handling Airspace Matters contains responsibilities and procedures for Commercial Space operations. The following lists the roles and responsibilities of organizations and individuals involved in the commercial space LOA process:

**a.** The respective ATO Service Center OSG will serve as facilitator of the LOA development.

**b.** ATO Service Center OSG will coordinate with the appropriate Service Area, ATO Space Operations, the Office of Commercial Space Transportation (AST), the Office of Airports, and other offices having responsibilities in accordance with the operation.

**c.** Each LOA must include, but is not limited to:

**1.** Names and contact information for all parties involved.

**2.** For launch/reentry operation LOAs: Description of operation to include vehicle type and characteristics; anticipated frequency of operations; and requested airspace, altitude, vehicle positioning data transmittal, and Aircraft Hazard Area (AHA) information.

**3.** For launch/reentry site LOAs: Brief description of the launch/reentry site, types of anticipated



operations, and anticipated frequency of proposed operations.

4. Operating procedures to include communications, real-time coordination, NOTAM content issuance, contingency, and emergency.

#### **4-3-7. ANNUAL REVIEW/REVISIONS**

a. Review LOAs at least annually and update as necessary. Examine current LOAs for practices and/or procedures that are no longer required. Reviewing includes both content and relevance that achieve full operational efficiency and customer flexibility. Review and, if necessary, update LOAs when new/revised instrument flight procedures are published or national procedures are implemented or changed.

##### **NOTE-**

*Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures/](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/).*

##### **REFERENCE-**

*FAA Order JO 7210.3, Para 2-1-2, Facility Standard Operating Procedures Directive.*

*FAA Order JO 7210.3, Para 2-1-6, Checking Accuracy of Published Data.*

*FAA Order JO 7210.3, Para 4-3-3, Developing LOA.*

b. 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.

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

#### **4-3-8. CANCELLATION**

After appropriate coordination with LOA signatories and the Service Area, cancel any agreement which is no longer applicable. Ensure that the FDR is updated.

FIG 4-3-1

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

(Name) Center/Approach Control and (Name) 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) 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 must retain the authority to withdraw the provisions of this agreement at any time.**4. PROCEDURES:**

a. Local Special VFR operations. The (name) FSS must 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 must 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 must not be cleared for an approach until the 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) FSS may authorize aircraft to enter, depart, or fly through the surface area when no Special VFR operations are in progress. Authorization must be granted as outlined in 4a.

(2) Aircraft desiring to enter the surface area during times Special VFR operations are in progress must 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) FSS must 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) FSS\_\_\_\_\_  
Air Traffic Manager, (Name) ARTCC/Approach  
Control

FIG 4-3-2

**Format for an ARTCC/Air Division Letter of Agreement**

(Name) Air Route Traffic Control Center and (Name) Air Division  <div style="text-align: center;"><b>LETTER OF AGREEMENT</b></div> <div style="text-align: right;">EFFECTIVE: _____</div> <p>SUBJECT: Interfacility 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> <div style="border-top: 1px solid black; margin-top: 10px;">Air Traffic Manager, (Name) ARTCC</div> <div style="border-top: 1px solid black; margin-top: 10px;">Commander, (Name) Air Division</div> <div style="border-top: 1px solid black; margin-top: 10px;">(Title of other appropriate authority)</div>
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**4-3-9. 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 must 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 must be specifically defined in facility directives.

**REFERENCE-**

FAA Order 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 must require that any deviation from the specified procedure invalidates the procedure for that situation and requires that verbal coordination be completed as per FAA Order JO 7110.65, Air Traffic Control, paragraph 2-1-14, Coordinate Use of Airspace, paragraph 2-1-15, Control Transfer, paragraph 5-4-5, Transferring Controller Handoff, paragraph 5-4-6, Receiving Controller Handoff, or paragraph 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 precoordinated 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 must be handled as follows:*

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

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

**(c)** *Sector 63 must 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, must then clear the aircraft to the appropriate altitude.*

**(e)** *Sector 20 must 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 ERAM FDB will not be displayed to the controller when operating on the backup system in EBUS only mode.

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

**4.** The air traffic manager must 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 FAA Order 1350.14B, 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 must be considered a secondary function and must not interfere with the accomplishment of operational duties.

b. Air traffic managers must 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 subparagraph 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 must 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, where FAA telecommunications network capability exists (excluding flight service stations), must use the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230-4. Any Mandatory Occurrence Report (MOR), documented in CEDAR will automatically generate an FAA Form 7230-4 entry; however, some Form 7230-4 entries do not require an MOR as addressed in paragraph 4-6-5h.

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.

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, OSIC, 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, must 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. Except as provided in paragraph 4-6-4, use of a computer printout or ink is mandatory. Signatures or handwritten initials must be in either blue or black ink. Handwritten entries must be printed, rather than in script. Remarks section entries must be single-spaced.

**b.** Make all time entries in UTC, except that in the section titled “Personnel Log,” local time must 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 must indicate the employee responsible for the watch and must 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 must 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 must sign on/off as follows:

**1.** When a typed or handwritten FAA Form 7230-4 is used, the employee assuming responsibility for the watch must sign on using their operating initials and must 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 must sign on using their name, for example, “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 must 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, 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 must 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 must 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 paragraph 4-6-5, Preparation of FAA Form 7230-4.*

**h.** FAA Order 7210.632, Air Traffic Organization Occurrence Reporting, defines situations requiring a MOR. When a MOR is required, include enough detail in the MOR to provide an understanding of the circumstances that initiated the occurrence. Events such as tarmac delays, no-notice ground stops/holding, and accidents are documented on FAA Form 7230-4; no MOR is required for these items. Other reporting and notification requirements related to tarmac delays, no-notice ground stops/holding, and accidents may apply.

**1.** En route, terminal and oceanic facilities must use the CEDAR tool to record and disseminate MORs and to document the resolutions of MORs.

**2.** Flight service stations may use an automated version of FAA Form 7230-4 or establish local forms and procedures for recording, disseminating, and documenting the resolution of MORs. 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” must 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 subparagraph 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.** Employees other than the person responsible for the watch who make an entry must initial or enter initials for each of their own entries.

**k.** Use additional forms as necessary to complete the reporting of the day’s activity.

**l.** Make an entry closing out FAA Form 7230–4 at the close of business.

**m.** The air traffic manager, or his/her designee, must 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 must 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 must be prepared daily. All logs, including automated ones, must reflect 24 hours or the facility’s official operating hours, if less than 24 hours daily.

**b.** Position logs must 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 must be retained for one year prior to destruction.

**c.** Prepare FAA Form 7230–10 as follows:

**1.** Field 1 must contain the facility three–letter identification code.

**2.** Field 2 must 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 must be left blank.

**(a) ARTCCs:** ARTCCs must use sector identifiers which have been approved by the En Route and Oceanic Area Office.

**(b) TERMINALS and FSSs:** 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 must 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*: Use two-letter codes, as follows:

**TBL 4-6-3**  
**Field 3 – FSS**

<i>Designator</i>	<i>Position</i>
BC	Broadcast
FD	Flight Data
IF	Inflight
NO	NOTAM
OT	Other
PF	Preflight
WO	Weather Observer

4. Field 4 must contain the date in digit format. All spaces must be used.

5. Field 5 must 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 must contain the UTC time that the OJT instruction or evaluation begins.

6. Field 6 must contain the operating initials of the employee working the position.

7. Field 7 must 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 must contain the UTC time that the OJT instruction or evaluation ends.

8. Field 8 must contain the appropriate code identified at the bottom of page 1 of the form.

9. Field 9 must 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 must 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 must 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.



## Section 5. 14 CFR Part 91, UAS Operations

### 5-5-1. TYPES AND AUTHORITY

#### a. Public aircraft operating under Part 91.

1. Public aircraft operations are defined in 14 CFR, Part 1, Definitions & Abbreviations and 49 U.S.C. § 40102, 40125.

2. For UAS operating (including tethered/ moored UAS) as public aircraft, the authority is the Certificates of Waiver or Authorization (COA) or as specified in a Memorandum of Agreement (MOA), or Memorandum of Understanding (MOU) between the using agency and FAA Headquarters. These types include:

(a) Standard COA.

(b) Blanket COA.

b. UAS (including tethered/ moored UAS) operating as civil aircraft operating under Part 91.

1. Any operation that does not meet the statutory criteria for a public aircraft operation is considered a civil aircraft operation and must be conducted in accordance with all FAA regulations applicable to the operation.

2. For UAS operating as civil aircraft the authority is a special airworthiness certificate, restricted category aircraft (21.25), Type Certificate, or a Section 44807 exemption with COAs.

3. When the Section 44807 exemption is granted, the petitioner will be issued a Blanket COA. If the operation cannot be conducted under the provisions of the Blanket COA, the proponent must apply for a Standard COA. A waiver request to a Blanket COA will not be approved.

### 5-5-2. OPERATIONS

a. UAS operating under Part 91 COA can be VFR or IFR.

b. The UAS Pilot-in-Command (PIC) is to give way to all manned aircraft, except when operating under IFR.

c. UAS operations should not impede, delay, or divert manned aircraft operations, except as directed by ATC for operational necessity.

d. If a Part 91 operation is conducted entirely at or below 400 ft. AGL then any ATC services will be contained in a Letter of Agreement or ATC Memorandum.

e. Flights below Flight Level (FL) 180 must have a dedicated observer or a waiver to 14 CFR 91.113. These duties will be performed by a ground-based observer or chase plane. UAS pilots and observers must be responsible for only one UA at a time unless authorized in the COA.

1. Daisy chaining of observers or observers on a moving platform may be approved on a case-by-case basis and as authorized in the COA.

2. When a ground-based/chase plane observer is required, a pilot may not perform concurrent duties as the pilot and an observer.

f. Procedures for non-joint-use Department of Defense (DOD) airfield operations will be specified by the DOD.

g. For all operations occurring on-airport, follow procedures in FAA Order JO 7200.23, Processing of Unmanned Aircraft Systems Requests, Chapter 6, 14 CFR Part 91 Certificate of Waiver or Authorization (COA) Processing.

### 5-5-3. RESPONSIBILITIES

a. UAS flying under IFR should be handled in the same manner as manned IFR aircraft, however, consideration should be given to the possibility of unique UAS performance characteristics.

b. Lost Link Procedures will vary based upon the type of UAS and must be included in the COA. ATC specialists must have access to all coordinated information available in its simplest form, to determine the actions a UAS will take in these scenarios. The Operations Supervisor/Controller-in-Charge (OS/CIC) should ensure that coordinated information is available, and if known, that the controller has a method of contacting the appropriate UAS PIC. In the event of a UAS lost link, procedures outlined in FAA Order JO 7110.65, paragraph 5-2-6, Unmanned Aircraft Systems (UAS) Lost Link, will be followed.

c. The following operations are not authorized for UAS:

1. Instructions to visually follow another aircraft.

2. Opposite Direction Operations (ODO).

3. Special VFR operations.

4. Operations requiring UAS to maintain visual separation.

d. The use of sequencing as indicated in FAA Order JO 7110.65, Chapter 3, Section 8, is authorized with the exception of issuing instruction to follow another aircraft or to maintain visual separation.

e. In the event of a UAS emergency, procedures outlined in FAA Order JO 7110.65, Air Traffic Control, Chapter 10, will be followed.

f. Air traffic facility management at facilities where UAS operations are being conducted are required to ensure air traffic controllers are familiar with the contents of each COA and any applicable LOAs impacting their area of specialization.

g. Operational communication with any UAS PIC must be on a recorded line, when available.

#### **5-5-4. OPERATIONS IN CLASS A AIRSPACE**

a. UAS must operate on an IFR flight plan and a standard COA.

b. UAS must comply with the provision of § 91.135.

c. ATC must provide separation and ATC services per FAA Order JO 7110.65 with consideration given to UAS performance characteristics and potential latency issues.

#### **5-5-5. OPERATIONS IN TERMINAL RADAR SERVICE AREA (TRSA)**

a. If TRSA services are provided, they will be in accordance with FAA Order JO 7110.65, Chapter 7.

b. If it is determined that ATC will provide services in the TRSA for UAS operating entirely at or below 400 ft. AGL, those services will be specified in an LOA or ATC Memorandum.

#### **5-5-6. OPERATIONS IN CLASS B AIRSPACE**

a. If Class B services are provided, they will be in accordance with FAA Order JO 7110.65, Chapter 7.

b. If it is determined that ATC will provide services in the Class B for UAS operating entirely at or below 400 ft. AGL, those services will be specified in an LOA or ATC Memorandum.

c. UAS must operate on a standard COA or in accordance with using agency/FAA UAS MOA/MOU.

#### **5-5-7. OPERATIONS IN CLASS C AIRSPACE**

a. If Class C services are provided, they will be in accordance with FAA Order JO 7110.65, Chapter 7.

b. If it is determined that ATC will provide services in the Class C for UAS operating entirely at or below 400 ft. AGL, those services will be specified in an LOA or ATC Memorandum.

#### **5-5-8. OPERATIONS IN CLASS D AIRSPACE**

UAS must operate on a standard COA or in accordance with using agency/FAA DOD Class D notification per the using agency/FAA UAS MOA/MOU.

#### **5-5-9. OPERATIONS IN CLASS E AIRSPACE**

UAS must comply with provisions of § 91.127 unless otherwise authorized by the jurisdictional ATC facility.

#### **5-5-10. OPERATIONS IN CLASS G AIRSPACE**

a. UAS must comply with provisions of § 91.126 unless otherwise authorized by the jurisdictional ATC facility.

b. UAS must operate on a standard or blanket COA in accordance with using agency/FAA UAS MOA/MOU.

#### **5-5-11. LETTERS OF AGREEMENT (LOA)/MEMORANDUMS**

a. LOAs should be developed in accordance with FAA Order JO 7210.3, Facility Operation and Administration.

**b.** LOAs should address contingency procedures, if not contained in the COA, including but not limited to:

- 1.** Lost Link, to include flight termination points.
- 2.** Flyaway.
- 3.** Lost Sight of UAS by the visual observer.
- 4.** Any specific altitude limitations, geographic boundary limitations, preferred route assignments,

and periods of operation(s). This information must be provided to the ATC facility involved in the LOA via graphical depiction.

- 5.** Weather requirements for operations.
- 6.** ATC facilities responsibilities.
- 7.** UAS proponent responsibilities.

***NOTE–***

*LOAs may be used in conjunction with COAs when the ATM deems it necessary; they cannot be used in lieu of COAs.*



## Section 3. Operations

### 6-3-1. HANDLING OF SIGMETs, CWAs, AND PIREPs

#### a. SIGMETs and CWAs:

1. The CWSU meteorologist is the focal point for the review of SIGMETs to determine application to the ARTCC area of responsibility and may issue a CWA to modify or redefine the SIGMET information.

2. The CWSU meteorologist may also issue a CWA in advance of a SIGMET when the observed or the expected weather conditions meet SIGMET criteria or when conditions do not meet SIGMET criteria but are considered significant.

3. The weather coordinator (WC) has the primary responsibility for the inter/intrafacility dissemination of AIRMETs, SIGMETs, urgent PIREPs (UUA), routine PIREPs (UA), and CWAs and must ensure that sufficient information is disseminated to facilitate the required alert broadcasts.

#### REFERENCE-

■ FAA Order JO 7210.3, Chapter 18, Section 26. Weather Management.

4. Terminal ATC facilities must relay the SIGMET and the CWA information to towers under their jurisdiction.

#### b. PIREPs:

1. The WC is the focal point for handling PIREP requests and for the dissemination of urgent and routine PIREPs within the ARTCC and to terminal ATC facilities without Leased Service A System (LSAS) which are or may be affected.

2. The CWSU meteorologist solicits PIREPs through the weather coordinator or directly from the controllers when required.

(a) Both solicited and unsolicited PIREPs that meet the urgent PIREP criteria must be distributed immediately via the LSAS.

(b) Solicited and unsolicited routine PIREPs must be distributed in a timely manner.

c. PIREP classification: Categorize PIREPs as follows:

1. URGENT: Weather phenomena reported by a pilot which represents a hazard or a potential hazard to flight operations. Disseminate reports of the following conditions as URGENT PIREPs:

(a) Tornadoes, funnel clouds, or waterspouts.

(b) Severe or extreme turbulence (including clear air turbulence).

(c) Severe icing.

(d) Hail.

(e) Low level wind shear.

#### NOTE-

*Defined as wind shear within 2,000 feet of the surface.*

(f) Volcanic eruptions and volcanic ash clouds.

(g) Detection of sulfur gases (SO<sub>2</sub> or H<sub>2</sub>S), associated with volcanic activity, in the cabin.

#### NOTE-

*The smell of sulfur gases in the cockpit may indicate volcanic activity that has not yet been detected or reported and/or possible entry into an ash-bearing cloud. SO<sub>2</sub> is identifiable as the sharp, acrid odor of a freshly struck match. H<sub>2</sub>S has the odor of rotten eggs.*

(h) Any other weather phenomena reported which are considered by the specialist as being hazardous or potentially hazardous to flight operations.

2. ROUTINE: Classify all solicited and unsolicited PIREPs as routine unless otherwise indicated.

### 6-3-2. RECEIPT OF NOTAM DATA

ARTCC air traffic managers must coordinate with other air traffic facilities in their area to ensure that adequate procedures are established for the receipt and distribution of NOTAMs. NOTAM distribution may be accomplished via the Aeronautical Information System Replacement (AISR) or accessed at <https://notams.aim.faa.gov/notamSearch> as a source for NOTAM information.

### 6-3-3. REVIEW AIRSPACE STRUCTURE

Although magnetic radials are used in planning airways/routes, conversion to true radials is required for designation. The final magnetic radials are not

determined until the airspace action is charted. As a result, differences from planned magnetic radials may occur in the conversion of true to magnetic radials. Differences may also occur later due to changes in the magnetic variation, which is recomputed every 5 years. These differences could contribute to the misapplication of the VFR altitude hemispheric rule. Therefore, ARTCC air traffic managers must conduct a continuing review of the airway and jet route structures and proposed new airspace cases and bring any differences to the attention of the En Route and Oceanic Operations Service Area Office.

#### **6-3-4. FLIGHT DATA UNIT**

**a.** The Flight Data Unit (FDU) is responsible for processing and disseminating operational information necessary for NAS operations.

**b.** The FDU must provide system support during outage(s) of critical systems and/or software. These responsibilities include data recovery, manual processing, and disseminating information or data products as necessary for safe and efficient operations.

**c.** The Air Traffic Manager (ATM) must:

**1.** Ensure all FDU responsibilities and procedures listed below are established in local orders or directives.

**2.** Assign additional duties of a recurring nature based on unique facility requirements.

**3.** Provide FDU specialists a copy of, or access to, the following:

**(a)** FAA Order JO 7110.10, Flight Services.

**(b)** FAA Order JO 7110.65, Air Traffic Control.

**(c)** FAA Order JO 7900.5, Surface Weather Observing-METAR.

**(d)** FAA Order 7930.2, Notices to Air Missions (NOTAM).

**(e)** Position binder, which includes:

**(1)** Procedures for accomplishing assigned position related duties and responsibilities.

**(2)** Examples and formats for seldom used procedures.

**(3)** Cross references to documents and lists contained in other publications which may be used where applicable.

**d.** Unless otherwise specified in a facility directive or a letter of agreement, the Flight Data Communications Specialist (FDCS) performs the following:

##### **1. Flight Plan Data.**

**(a)** Process domestic flight plan(s) proposals, corrections, amendments, and remove strip requests.

**(b)** Process international flight plan(s) proposals, corrections, amendments, remove strip requests, and departure messages.

**(c)** Process military flight plans.

**(d)** Provide data search assistance for Search and Rescue (SAR) information requests.

##### **2. Weather Products:**

**(a)** Support the TMU weather coordinator with inter/intrafacility dissemination of the weather data products described in the Weather Management section of this order. This should include both urgent PIREPs (UUA) and routine PIREPs (UA).

##### **REFERENCE-**

*FAA Order JO 7210.3, Para 18-26-4 b1, Weather Management.*

**(b)** Provide inter/ intrafacility dissemination of international weather products as needed.

**(c)** Perform altimeter and weather data checks and system updates as required.

**(d)** Provide backup services for terminal facility PIREP and METAR entries.

##### **REFERENCE-**

*FAA Order JO 7110.65, Para 2-6-3 c, Weather Information.*

##### **3. NOTAMs:**

**(a)** Process and disseminate FDC, Special Use Airspace (SUA), and Temporary Flight Restriction (TFR) NOTAMs.

**(b)** Provide assistance with formatting and inputting Special Activity Airspace (SAA) NOTAMs.

**(c)** Process and disseminate NOTAM D information as necessary, to include ERIDS backup services.

**4. System/Administrative Messages:** Process and disseminate the following messages:

- (a) GENOTs,
- (b) CIRNOTs,
- (c) Oceanic track,
- (d) ALTRV movement/change.

**5. Classified National Security Information (CNSI) and Communications Security (COMSEC):** Handle, safeguard, and protect CNSI and COMSEC material in accordance with national policies, FAA orders, and local SOPs.

**6. Clearance Relay:**

(a) Responds to telephone requests for ATC clearances received from pilots by contacting the

appropriate sector within the ARTCC or approach control facility and relays clearance issued to the pilot verbatim.

(b) Advises appropriate ARTCC sector or approach control facility of IFR Flight Plan cancellations received over the telephone.

**6-3-5. CHANGES TO MTR AND MOA  
PUBLISHED ACTIVITY SCHEDULES**

ARTCCs must use the procedures as outlined in FAA Order 7930.2, Notices to Air Missions (NOTAM), paragraph 6-1-2, Special Activity Airspace (SAA), when MTR or MOA activity is scheduled to occur at other than published or charted times.





## Section 10. En Route Information Display System (ERIDS)

### 6-10-1. GENERAL

ERIDS is a real time, interactive, electronic information display system that is used as a replacement for paper sources of information. ERIDS provides controllers, supervisors, and traffic management personnel with access to aeronautical data, weather data, airspace charts, ATC procedures, NOTAMs, PIREPs, and other sources of ATC information.

### 6-10-2. REQUIREMENTS

a. Where available, ERIDS must be used to provide controllers with the following information:

1. Sector binder information.

#### REFERENCE-

FAA Order JO 7210.3, Para 6-2-2, En Route Sector Information Binder.  
FAA Order JO 7210.3, Para 2-1-3, Position/Sector Binders.

2. Notices to Air Missions (NOTAMs). Facilities using ERIDS for NOTAM distribution must develop a backup plan in the event ERIDS becomes unavailable/unusable.

3. National directives.

4. United States Government flight information publications/DOD flight information publications.

5. Other air traffic information and lists determined by facility directives.

b. ERIDS may be used to record and disseminate PIREPs.

c. ERIDS must not be used to disseminate dynamic operational information; for example, miles-in-trail restrictions, runway in use, weather information other than PIREPs, etc.

d. Facilities must develop local procedures to meet the following requirements:

1. Facilities using ERIDS must ensure that the provisions of FAA Order JO 7210.3, paragraph 6-2-2, are met in the event of an ERIDS outage or degradation.

2. Facilities using ERIDS in lieu of sector information binders must ensure that all information is available and maintained for each operational sector in accordance with the provisions of FAA Order JO 7210.3, paragraph 6-2-2.



## Section 2. Deficiencies

### 7-2-1. DEFICIENCIES IN SYSTEM

Note deficiencies in the radar system on FAA Form 7230-4. Reconcile them as follows:

a. After consultation with the Technical Operations representative, the ARTCC air traffic manager or his/her designated representative must decide if the radar system is usable. Consider atmospheric or other phenomena that may temporarily affect the radar performance.

b. A certification by Technical Operations personnel that the malfunction has been corrected must be entered on the sector's and the OMIC log.

**NOTE-**

*Technical Operations representatives ground check the equipment to determine if the system is operating satisfactorily or request a special flight check.*

### 7-2-2. AMPLITRON OR PARAMETRIC AMPLIFIER FAILURE

a. When an ARSR/amplitron fails, the magnetron continues to feed normal magnetron power to the transmitting system. In the receiving system, a failure of the parametric amplifier will not cause a complete system failure. Under these conditions, the radar system still has limited operational capabilities.

b. When amplitron and/or parametric amplifier service fails in both channels at the same time, the radar will continue to operate but a loss of coverage will be experienced. The Technical Operations technician will immediately advise the ARTCC OMIC of any failure. Following this, the technician will provide an estimate of the shortest period of time required to restore normal service to one channel and will estimate how much time, if any, could be saved by a complete radar shutdown. The OMIC must determine the course of action to be followed. The Technical Operations technician will abide by the OMIC's decision and proceed accordingly.

c. The OMIC must contact Technical Operations, which will then issue a NOTAM as required.

### 7-2-3. ELECTRONIC ATTACK (EA)

At joint-use radar locations, EA activity can subsequently result in a request to apply EA videos to the radar system, which may necessitate the decertification of the narrowband search radar. The SE should be consulted concerning the effect of EA on the operational use of the radar (narrowband/broadband) prior to approving/disapproving a request to conduct EA activity.



b. Facility air traffic managers must ensure all operational personnel are properly briefed prior to the effective date of local SMGCS plan. All air traffic procedures included in the SMGCS plan must be contained in a facility directive.

#### 10-1-11. MOBILE CONTROL TOWERS

a. Mobile control towers must be used at FAA locations:

1. To provide services during a move from an old tower structure into a new tower.

2. When repairs, rehabilitation, or installation of new equipment make the tower structure temporarily uninhabitable.

3. During periods of natural emergency; e.g., the tower structure has been damaged by fire, accident, or wind.

4. During national emergencies as required by the DOD at FAA and non-FAA locations.

b. Mobile control towers may be used at non-FAA locations when requested by flying organizations, cities, or other political entities to assist in the operation of fly-ins, air races, etc., provided:

1. The Terminal Operations Area Office, after careful consideration of a request to use FAA personnel and/or equipment, determines that the service is required and can be made available without:

(a) Jeopardizing FAA activities.

(b) Interfering with the gainful employment of competent non-Federal personnel.

2. Non-Federal personnel selected to support the event are properly certificated and rated in accordance with 14 CFR Part 65 for the airport.

3. The requesting organization is apprised that the mobile unit is subject to immediate recall should an emergency arise.

#### 10-1-12. PARTICIPATION IN LOCAL AIRPORT DEICING PLAN (LADP)

a. Officials, at airports operating under 49 CFR Part 1540/1542 and 14 CFR Part 139 subject to icing weather conditions with control towers, should develop LADPs in order to involve all interested parties in the deicing/anti-icing process. Aircraft

departing from airports without a LADP are not exempt from any traffic management initiative.

b. The operators of these airports have been requested to host meetings involving airport users and air traffic in a partnership effort to achieve common solutions to local aircraft ground deicing/anti-icing problems. The emphasis is on developing local strategies that minimize the amount of time an aircraft spends on the ground after being deiced/anti-iced.

#### NOTE-

*Deicing is the process of removing existing frozen precipitation, frost, or ice from aircraft surfaces. Anti-icing is the process of preventing accumulation of frozen contaminants on aircraft surfaces. Both processes may involve the application of various fluids to the aircraft.*

c. Air traffic managers who receive requests from airport operators to participate in these meetings will use the following guidance:

1. When requested by the airport operator, the air traffic manager must participate in the development of a LADP. Since a LADP can affect an airport arrival rate and/or departure rate, the air traffic manager must include the participation of the air traffic manager from the appropriate ARTCC, who must participate and/or utilize their traffic management unit (TMU). The plan will be reviewed and updated annually. The plan must include:

(a) A clear definition of triggering mechanism(s) used to implement the LADP, e.g., holdover tables, visible precipitation.

(b) Assignment of responsibility to notify air traffic of implementation and cessation of the LADP.

#### NOTE-

*Air traffic facilities should not become the triggering mechanism except in rare circumstances. If air traffic is designated as the triggering mechanism, submit the proposed LADP to the Terminal Operations Service Area office for approval.*

2. Develop or enhance local strategies to manage the number of aircraft at the departure runway queues and minimize the amount of time an aircraft spends on the ground after being deiced.

3. Gate hold procedures, when used as part of a LADP, should be initiated at the time the plan is implemented. The application of gate hold procedures during deicing/anti-icing operations are not predicated on other requirements of FAA Order JO 7210.3.

**NOTE–**

*The pilot-in-command remains the final authority as to aircraft operation. Air traffic is not responsible for tracking or adherence to aircraft holdover times.*

4. Coordinate the expected start time, actual start time and stop time of the LADP with the appropriate ARTCC TMU. The ARTCC TMU will forward these times to the ATCSCC.

5. Balance the airport flow to accommodate demand. Adjust the arrival rate with the departure rate. These rates should reflect the number of operations expected to occur during deicing/anti-icing conditions and facilitate minimizing the amount of time an aircraft spends on the ground after being deiced/anti-iced.

6. Aircraft operators at LADP airports are responsible for complying with issued Expect Departure Clearance Time (EDCT) times and will not be exempted from compliance with these times. However, once an aircraft has been deiced/anti-iced, it must be released unless a ground stop applicable to that aircraft is in effect. If a facility believes aircraft operators are not performing deicing/anti-icing in a manner consistent to meet the EDCT time, the facility must notify the ATCSCC through the appropriate TMU.

7. Allocate the available departure slot capacity, when departure rates are reduced because of deicing, consistent with available resources. Facilities should consider the following un-prioritized list of options when developing departure allocation procedures.

(a) OPTION A: First come, first served. When departure demand exceeds capacity, the air traffic facility will minimize departure delays at the runway queue by using gatehold or an equivalent procedure.

(b) OPTION B: Air traffic will determine the departure allocation based upon the departure rate and the stated demand, obtained directly from the users, during a specified time period. For example, air traffic will coordinate with each user and receive their demand for a 15-minute time period. Then, based upon the total airport departure demand for the 15-minute time period, determine the number of flights which the user will be allocated, advise each user, and determine which flights they will use to fill their allocation.

(c) OPTION C: Airport users determine the departure allocation. Air traffic will notify the users of the departure rate in effect and the users will then advise air traffic which flights they will use to fill their allocation. Air traffic will provide input on the coordination process but will not accept an active role in developing the departure allocation.

(d) OPTION D: Air traffic determines the departure rate and informs the users of the number of operations expected during a specific time period. Air traffic determines the total percentage of each users' daily operations based upon a "typical busy day" by dividing each of the users total daily operations by the airports total daily operations. Then, air traffic determines each users hourly share by multiplying the users daily percentage times the departure rate. The users will then distribute their hourly share evenly throughout the specific time intervals.

**NOTE–**

1. *Air traffic may or may not take an active role in determining the percentage of each user's operations on a "typical busy day" and each user's hourly share.*

2. *If a user has only one aircraft scheduled per hour, attempts should be made to accommodate it.*

8. Provide coordination, communication, and feedback with the parties included in the plan. Coordination should take place when airports are forecast to have icing conditions, during deicing/anti-icing and after deicing/anti-icing, to effect necessary adjustments. Prior to and after each winter season, the airport participants should assess the efficiency of the airport plan and address any specific concerns.

9. Develop an air traffic facility training program. Prior to each winter deicing/anti-icing season, conduct annual controller refresher training including, but not limited to, awareness of and sensitivity to the peculiar nature of deicing/anti-icing operations, icing conditions, and minimizing delays at the runway departure queue.

### **10-1-13. PRECISION OBSTACLE FREE ZONE (POFZ)**

Coordinate with the Airport Division and Flight Standards to determine if precision approach operations are impacted by the POFZ. ILS hold lines will need to be relocated if aircraft (vertical surfaces) or vehicles fall within the POFZ.

## Section 3. Operations

### 10-3-1. DISSEMINATION OF WEATHER INFORMATION

Facility air traffic managers must establish procedures for the prompt collection and dissemination of weather information. The procedures must address SIGMET, AIRMET, CWA, PIREP and other known or observed weather that may affect aircraft safety. These procedures must contain direction for a central source to be responsible for:

- a. Soliciting and handling PIREPs in accordance with the provisions of FAA Order JO 7110.65, Air Traffic Control, paragraph 2-6-2, PIREP Solicitation and Dissemination.
- b. Reviewing SIGMET, AIRMET, and CWA to determine the required distribution, and disseminating SIGMET, AIRMET and/or CWA information in accordance with the following:

**NOTE-**

*Simply attempting to accelerate the movement of all weather data will not accomplish our objectives. Greater emphasis is being placed on screening and selective dissemination of weather data. Selective dissemination takes into account the need to alert pilots to significant weather reports in sufficient detail to assist them in making decisions pertinent to flight safety and to provide the information an ATC facility requires to promote the safe and efficient use of its airspace.*

1. Disseminate pertinent information from SIGMET, AIRMET, or CWA to other terminal ATC facilities within your terminal area.
2. Disseminate selective SIGMET, AIRMET, and CWA information on a need-to-know basis in accordance with the provisions of FAA Order JO 7110.65, paragraph 2-6-6, Hazardous Inflight Weather Advisory.

### 10-3-2. WIND INSTRUMENTS AT APPROACH CONTROL FACILITIES

- a. The same wind sensor may be used to provide wind information in ATCT and approach control facilities when they are located on the same airport.
- b. Approach control facilities not located at the airport to which radar service is being provided may issue wind data received from the tower at that airport. The wind data may be transmitted to the

approach control facility by TelAutograph, data communication circuit, voice lines, etc.

- c. The facility air traffic manager of an approach control that provides radar service to an Air Force Base must identify facility requirements for wind indicators, in writing, to the local USAF Air Weather Service Commander.

### 10-3-3. LOW LEVEL WIND SHEAR/MICROBURST DETECTION SYSTEMS

- a. Procedures for the dissemination of wind information derived from the Low Level Wind Shear Alert System (LLWAS) or other automated wind shear detection systems, are contained in FAA Order JO 7110.65, paragraph 3-1-8, Low Level Wind Shear/Microburst Advisories. Guidance to facility air traffic managers concerning the operational use of the LLWAS is as follows:

1. Prior to operational use of LLWAS facilities, a letter to airmen must be published explaining, as a minimum, the location and designation of the remote sensors, the capabilities and limitations of the system, and the availability of current LLWAS remote sensor wind information if requested by the pilot. A new letter to airmen must be issued whenever changes to the above minimum criteria or system upgrade/modifications are made.

**NOTE-**

*The LLWAS may be retained as a backup system no longer than 6 months after the WSP has been commissioned.*

2. At positions of operation where installed, LLWAS airport wind information appearing on the tower LLWAS display may be used in place of the direct dial or commissioned AWOS/ASOS automated display wind information.

**NOTE-**

*Towers having the responsibility for weather observations must comply with the requirements as specified in subparagraph 2-10-1a, Wind Instrument Sensors.*

3. TRACONs may use direct dial, LLWAS, or commissioned AWOS/ASOS automated display wind information for operational purposes.
4. Facility managers may designate the use of displayed wind information oriented to the threshold end of the runway in lieu of airport winds where

LLWAS expanded network systems or LLWAS that are integrated with TDWR are installed, if deemed operationally advantageous.

5. The LLWAS airport, direct dial, or commissioned AWOS/ASOS automated winds may be used during outages of the sensors that provide threshold winds:

(a) Include in the letter to airmen an explanation that wind information given to arriving aircraft on that runway/s may be derived from the automated AWOS/ASOS wind equipment or wind sensor equipment near the runway threshold rather than from the LLWAS airport wind source. It is not intended that controllers specify the remote source when issuing these winds to arriving aircraft, except when an alert occurs. This must be explained in the letter to airmen.

(b) Use wind information derived from commissioned AWOS/ASOS for ATIS broadcasts and issuing weather reports. Wind information from commissioned AWOS/ASOS or LLWAS centerfield may be used when issuing surface wind to departing aircraft.

**REFERENCE—**

FAA Order JO 7210.3, Para 2–10–1, Wind Instrument Sensors.

b. When it is determined that a component or the whole LLWAS has failed, take the following action: If a component such as a remote sensor fails, notify Technical Operations (Tech Ops). During periods when wind shear is likely to occur or has been reported; e.g., frontal activity, thunderstorms, or pilot reports, inform users by broadcasting on the ATIS that the component is out of service.

**EXAMPLE—**

*“Low level wind shear west boundary sensor out of service.”*

c. Technical Operations is responsible for the verification of the accuracy of the LLWAS. The SMO will notify air traffic of any equipment that is out of tolerance.

#### 10–3–4. RELAY OF RVR VALUES

a. Relay of RVR values from the weather observing facility to the control tower may be discontinued at the request of the tower when there is no traffic activity at that specific location.

b. Establish relative priorities on the visibility information at locations with two or more RVR runways where data is required for two or more runways.

#### 10–3–5. ADVANCE APPROACH INFORMATION

Where more than one position could issue the data, assign responsibility for issuing advance approach information to a specific position in a facility directive. Display the information so that it is readily accessible to the controller having a need for it.

#### 10–3–6. ILS HEIGHT/DISTANCE LIMITATIONS

a. An ILS is normally flight checked to 4,500 feet and 18 miles for the localizer and to 4,500 feet and 10 miles for the glide slope.

b. If an operational need to exceed these limitations exists, ATC submits an Expanded Service Volume (ESV) request IAW 8260.19, with a description of the flight procedure requiring it. Flight inspection must validate the ESV.

#### 10–3–7. LAND AND HOLD SHORT OPERATIONS (LAHSO)

a. The air traffic manager must determine a valid operational need exists before conducting simultaneous takeoff and landing or simultaneous landing operations. This need may be considered evident if:

1. Present airport capacity/arrival rate will be increased; and
2. Arrival/departure delays will be reduced; and
3. A reasonable savings in fuel consumption will result.

b. Before authorizing simultaneous takeoff and landing or simultaneous landing operations as specified in the current LAHSO directive.

1. Coordinate with each of the appropriate Flight Standards field offices having jurisdiction at the airport according to the type of aircraft operations involved and with user groups as required by paragraph 4–2–4, Coordination of ATC Procedures, including the appropriate military authority where units are based at the airport.



### 10-3-15. GO-AROUND/MISSED APPROACH

a. Tower facility directives must address procedures for go-arounds and/or missed approaches. The procedures must require controllers to issue control instructions as necessary to establish separation. During the development or review of these procedures, facilities must give consideration, at a minimum, to the following factors:

1. Operational position configuration.
2. Communication and/or control transfer.
3. Runway configuration.
4. Evaluation of existing waivers (for example, reduced separation on final).
5. Wake turbulence.
6. Weather conditions.
7. Type of approach (instrument or visual).

#### REFERENCE-

*P/CG Term – Go-around.*

*P/CG Term – Low Approach.*

*P/CG Term – Missed Approach.*

*FAA Order JO 7110.65, Para 3-8-1, Sequence/Spacing Application.*

*FAA Order JO 7110.65, Para 3-8-2, Touch-and-Go or Stop-and-Go or Low Approach.*

*FAA Order JO 7110.65, Para 4-8-11, Practice Approaches.*

*FAA Order JO 7110.65, Para 4-8-12, Low Approach and Touch-and-Go.*

*FAA Order JO 7110.65, Para 5-5-4, Minima.*

*FAA Order JO 7110.65, Para 5-6-3, Vectors Below Minimum Altitude.*

*FAA Order JO 7110.65, Para 5-8-4, Departure and Arrival.*

*FAA Order JO 7110.65, Para 5-8-5, Departures and Arrivals on Parallel or Nonintersecting Diverging Runways.*

*FAA Order JO 7110.65, Para 7-2-1, Visual Separation.*

*FAA Order JO 7210.3, Para 10-4-8, Simultaneous Converging Instrument Approaches, subpara b4(b).*

*FAA Order JO 7110.308, Para 6b1(d), Para 6c2(i).*

b. Where facilities vector aircraft conducting go-arounds or missed approaches below the minimum altitude for instrument operations, facility directives including LOAs, where applicable, must include:

1. Authorized headings or range of headings from each runway end to be used for vectoring aircraft conducting missed approaches/go-arounds until reaching the MVA/MIA. Authorized headings must be evaluated by the Service Center FPT if newly designated, and when changes are made; and

2. The display of those prominent obstacles on a video map, consistent with the assigned flight path, that influence the determination of the authorized

headings. Prominent obstacles, as defined in the Pilot/Controller Glossary, can be determined with the assistance of the Service Center FPT. When no prominent obstacles are identified, the facility directive must include a statement of this determination.

3. A statement that air traffic is responsible for terrain and obstruction avoidance when vectoring aircraft, not on a published procedure below the MVA/MIA during climbout, and are assumed to climb at the minimum climb gradient of 200 feet/NM.

#### REFERENCE-

*FAA Order JO 7110.65, Para 5-6-3, Vectors Below Minimum Altitude.*

*FAA Order 1050.1, Environmental Impacts: Policies and Procedures.*

c. Facility air traffic managers may develop procedural mitigations for non-intersecting converging runways when a 1 NM extension of the runway centerline crosses the centerline of the other runway or the 1 NM extensions of a runway cross the extension of another runway. Facility directives must:

1. Specify procedures to ensure that an arrival that executes a go-around does not conflict with a departure off the non-intersecting converging runway.

2. Define technological tools that could assist in the locally developed procedures.

3. Specify procedures to be used when conditions dictate that intersecting runway separation standards must be applied.

#### NOTE-

*The locally developed procedure will ensure that the potential go around aircraft will not conflict with a departing aircraft that is departing the non-intersecting converging runways. All locally developed procedures will be approved by the Director of Operations, Headquarters. ATMs will determine what tools are needed in the development of local procedures. These may include, but are not limited to:*

- a. *Arrival Departure Window (ADW)*
- b. *ASDE-X/ASSC Virtual Runway Intersection Point (VRIP)*
- c. *Cutoff Points (CP) developed with the use of enhanced TARGETS.*

#### REFERENCE-

*FAA Order JO 7110.65, Para 3-9-9, Non-intersecting Converging Runway Operations.*

d. The procedures must be evaluated on an annual basis to determine their effectiveness.

**e.** A facility may be permitted to conduct independent non-intersecting Converging Runway Operations (CRO) without use of the mitigations as defined in graph b, when the following conditions are met:

**1.** A documented independent safety analysis indicating that a specific non-intersecting CRO configuration meets FAA safety criteria.

**2.** Runway configurations for which these provisions are applied must be specified in a facility directive.

**NOTE—**

*The above provisions will only be considered after review of a facility Safety Risk Management Document (SRMD).*

**10-3-16. EQUIVALENT LATERAL SPACING OPERATIONS (ELSO)**

At locations conducting 10 degree course divergence

for simultaneous or successive RNAV departures on the same runway or parallel runways that are separated by 2,500 feet or more, air traffic managers must complete the following:

**a.** Create radar video map overlays that depict the initial departure tracks from each affected runway end.

**b.** Develop and administer initial controller training for ELSO. Annual proficiency training on local ELSO procedures are required.

**c.** Include in the facility Standard Operating Procedures or a Letter of Agreement with a satellite tower, that the OM/OS/CIC assess the feasibility of continuing ELSO when wind conditions dictate that aircraft cannot consistently fly the intended RNAV track. This is due to the detrimental effects of a strong cross wind component affecting initial departure tracks.

**g.** When simultaneous approaches are being conducted, the pilot is expected to inform approach control, prior to departing an outer fix, if the aircraft does not have the appropriate airborne equipment or they do not choose to conduct a simultaneous approach. Provide individual handling to such aircraft.

**h.** Prior to implementing Established on RNP (EoR) operations to parallel runways with centerline spacing 9,000 feet or less (9,200 feet or less at field locations above 5,000 MSL), air traffic managers must:

- 1.** Document all approach and/or transition pairings to be used during EoR operations. Document any existing approach and/or transition that requires application of incorrect flight procedure track separation (see FAA Order 8260.3, Chapter 16).

- 2.** Ensure approved EoR approach pairings comply with the EoR procedure criteria identified in FAA Order 8260.3, Chapter 16.

- 3.** Obtain authorization from the Service Area Director of Air Traffic Operations for the approved instrument approach pairings.

- 4.** Ensure facility directives/letters of agreement list the authorized approach pairs and address the integration of EoR operations with straight-in operations to the same or parallel runway/s. Facility directives/letters of agreement must address, at a minimum, breakout procedures, monitoring, and training requirements.

#### **REFERENCE—**

FAA Order JO 7110.65, Para 5-9-7, *Simultaneous Independent Approaches—Dual & Triple*.  
P/CG Term – Established on RNP Concept.

### **10-4-7. SIMULTANEOUS WIDELY-SPACED PARALLEL OPERATIONS**

**a.** Simultaneous independent approaches to widely-spaced parallel runways without final monitors may be conducted when:

- 1.** Instrument approach procedures are annotated with “Simultaneous Approach Authorized.”

- 2.** A separate approach system is required for each parallel runway. A minimum distance of more than 9,000 feet between centerlines is required when approaches are conducted at airports with field

elevations at or below 5,000 feet MSL, or 9,200 feet between runway centerlines is required with a field elevation above 5,000 feet MSL. Other integral parts of the total Simultaneous Approach System include radar, communications, ATC procedures, and appropriate airborne equipment.

- 3.** Weather activity is closely monitored that could impact the final approach course. Weather conditions in the vicinity of either final approach course may dictate a change of the approach in use.

- 4.** All turn-ons and final approaches are monitored by radar. Since the primary responsibility for navigation rests with the pilot, instructions from the controller are limited to those necessary to ensure separation between aircraft. Information and instructions are issued as necessary to contain the aircraft on the final approach course. Aircraft which are observed deviating from the assigned final approach course are instructed to alter course left or right, as appropriate, to return to the desired course. Unless altitude separation is assured between aircraft, immediate action must be taken by the controller monitoring the adjacent parallel approach course to require the aircraft in potential conflict to alter its flight path to avoid the deviating aircraft.

- 5.** Missed approach procedures are established with climbs on diverging courses. To reduce the possibility of error, the missed approach procedure for a single runway operation should be revised, as necessary, to be identical with that of a simultaneous approach operation.

- 6.** Separate radar and local control positions are established for each final approach course.

- b.** Record the time the operation begins and ends on the facility log.

- c.** Where possible, establish standard breakout procedures for each simultaneous operation. If traffic patterns and airspace permit, the standard breakout altitude should be the same as the missed approach altitude.

- d.** Provide individual handling to an aircraft when the crew informs you that the aircraft does not have the appropriate airborne equipment or they choose not to conduct a simultaneous approach.

- e.** Facility ATMs must ensure approach pairings, when conducted under the EoR concept, are identified in a Facility Directive and a Letter of Agreement (LOA), if applicable.

**REFERENCE—**

FAA Order JO 7110.65, Para 5-9-10, *Simultaneous Independent Approaches to Widely-Spaced Parallel Runways Without Final Monitors*.  
P/CG—Term Established on RNP Concept.

## **10-4-8. SIMULTANEOUS CONVERGING INSTRUMENT APPROACHES**

**a.** The procedures to conduct Simultaneous Converging Instrument Approaches (SCIA) must be developed in accordance with the following paragraphs.

**1.** The ATM must:

**(a)** Determine that the volume and complexity of aircraft operations requires the use of simultaneous converging instrument approaches. Additionally, no adverse impact on the users or air traffic control facilities can result from the implementation of the procedure.

**(b)** Coordinate with airport operations to ensure that runway intersection identification markings are in accordance with appropriate standards if the runways intersect.

**(c)** Coordinate with the responsible Service Area Flight Procedures Team (FPT) through the service area Operations Support Group (OSG) for the feasibility of SCIA procedural design and the ability to achieve minimums sufficient to justify procedural development. The FPT must consider all aspects of the approach, including NAVAIDS, approach lighting, and airport lighting.

**(d)** Prepare a staff study which includes:

**(1)** Type of aircraft and user groups that will be involved in SCIA operations.

**(2)** Anticipated effect on airport/ airspace capacity, including projected reductions in departure delays, airport arrival rate and projected savings in aircraft fuel consumption.

**(3)** Daily time periods during which the procedure would be applied.

**(4)** A preliminary environmental assessment in accordance with FAA Order 1050.1, Environmental Impacts: Policies and Procedures (see paragraph 4-1-6, Preliminary Environmental Review).

**2.** After completing steps 1 through 4 above, the ATM must:

**(a)** Submit the request for SCIA operations, to include the completed staff study and a draft graphic of the ILS/GLS or other Approach with Vertical Guidance (APV), to their OSG for review.

**(1)** The OSG must coordinate the procedure with the regional Flight Standards Division.

**(2)** When approved, the OSG will process the package through the FPT for development.

**(b)** Develop a Letter to Airmen defining local procedures to be used at least 30 days before the effective date. Additional means of publicizing local procedures must be employed in accordance with paragraph 4-2-4, Coordination of ATC Procedures.

**b.** The requirements for conducting SCIA operations to converging runways are:

**1.** Operational air traffic control radar.

**2.** Precision Approaches and/or Approach with Vertical Guidance (APV) must be established on each runway. The authorized approach types are: ILS, GLS, RNAV (GPS) with LPV and/or LNAV/VNAV minimums, or RNAV (RNP).

**3.** Non intersecting final approach courses.

**4.** SIAP specifically titled “Converging” and is published in parenthesis after the title of the procedure, for example, ILS V Rwy 17 (Converging).

**(a)** Missed approach points (MAP) must be at least 3 nautical miles (NM) apart, and

**(b)** Published missed approach procedures diverge by at least 45 degrees.

**(c)** The ATM must designate a primary and secondary runway for SCIA runway configurations including separation responsibility and procedures to be applied in the event a missed approach is initiated inside the MAP.

**(d)** Flight Procedures will determine the appropriate approach minimums for both primary and secondary runways for each SCIA configuration.

**5.** Converging approaches must not be conducted simultaneously to runways that intersect, when the ceiling is less than 1,000 feet or the visibility is less than 3 miles.

**6.** Converging approaches to runways that do not intersect may be conducted when the ceiling is

## Section 3. Training

### 11-3-1. TESTING AND CERTIFICATION

a. The AJT district must ensure that facility rating, control tower operator (CTO) certification, or FAA Air Traffic Safety Oversight Credentials are performed. The FCT ATM must contact the district in a timely manner to schedule CTO certification.

b. At Limited Aviation Weather Reporting Stations (LAWRS) designated FCTs, the FCT ATM must arrange initial LAWRS observer training and testing and coordinate certification or certificate

transfer with AJT-22 via email requests to 9-AJT-HQ-ASWO@faa.gov.

### 11-3-2. BRIEFING/TRAINING ITEMS

a. ATO Headquarters organizations, Service Center Offices, and districts must ensure that required briefing materials are distributed in a format that can be utilized by FCT facilities.

b. AJT districts must ensure that all required briefing items are forwarded to their assigned FCTs.



## Chapter 12. National Programs

### Section 1. Terminal VFR Radar Services

#### 12-1-1. PROGRAM INTENT

Basic Radar Service, TRSA Service, Class B and Class C services are the four types of Radar Services designed to enhance safety by providing air traffic services to VFR aircraft. The services were designed to provide the maximum level of radar services possible with existing equipment. Additional resources (displays, communications, telco, space, etc.) must be justified by requirements other than the volume of radar service provided to VFR aircraft. Pilots should be encouraged to participate by all available methods. This is best accomplished through effective procedures and a clear understanding of the Terminal VFR Radar Services available.

#### REFERENCE-

*P/CG Term – Terminal VFR Radar Services.*

*FAA Order JO 7110.65, Chapter 7, Section 6, Basic Radar Service to VFR Aircraft– Terminal.*

#### 12-1-2. IMPLEMENTATION

**a.** Facilities unable to meet the following requirements must submit justification to the respective Terminal Operations Area Office:

**1.** Newly commissioned terminal radar facilities must implement basic radar services to VFR aircraft, as prescribed in FAA Order JO 7110.65, Air Traffic Control, paragraph 7-6-1, Application, within 30 to 60 days after full IFR service is available. All radar facilities must provide basic radar service at primary airports and, where operationally feasible, at satellite airports with a control tower.

**2.** TRSA Service: In addition to basic radar service, provide separation between all participating aircraft operating in an established TRSA. If a need exists, facilities may develop coded VFR departure routes for TRSA service. When such routes are established, the following provisions apply:

**(a)** Prior to implementing coded VFR departure routes, the facility must coordinate with local user groups.

**(b)** A letter to airmen must be issued advising pilots of the procedure.

**(c)** These routes must only be issued to local users familiar with the procedure.

**(d)** Detailed departure instructions must be furnished when requested by the pilot.

**3.** Facility air traffic managers must address in writing, as a minimum, the following pertinent factors when submitting for service area office approval, either a recommendation for revision or withdrawal of an existing TRSA.

**(a)** Safety record/NMAC analysis.

**(b)** Airspace and operational efficiency.

**(c)** Unique geographical features.

**(d)** Hourly air carrier traffic density.

**(e)** User input. (User meetings, while highly desirable, are not required for withdrawals.)

**b.** Revisions to TRSAs must be submitted to System Operations Airspace and Aeronautical Information Services (AIS) at least 9 weeks prior to one of the appropriate publication dates; i.e., Sectional Charts, Notice to Air Missions, or the Chart Supplement U.S. The following are considered sufficient justification to warrant revision:

**1.** Changes in configuration, frequencies, or primary airport status (name, elevation, closed, abandoned, etc.).

**2.** Additions or deletions to the VFR checkpoints/NAVAIDs.

**3.** Typographical errors.

**c.** Advertising Basic Radar Services:

**1.** A sufficient number of user group meetings must be held to publicize implementation of basic radar services to as many local pilots as practicable.

**2.** Disseminate a letter to airmen explaining the program and including a drawing of the basic radar service area. The drawing should be on a cutout from the appropriate sectional chart and should show the following:

**(a)** Lateral and vertical dimensions.

**(b)** Frequency for each sector.

(c) Initial VFR checkpoints indicated by flags.

3. The facility air traffic manager must seek the cooperation of the FSDO in informing aviation interests about their responsibilities while operating in a basic radar service environment. Special emphasis should be placed on such points as:

(a) Pilot participation is urged, but it is not mandatory.

(b) Pilots should be aware that aircraft sequencing and traffic advisories are primarily based on aircraft maintaining assigned headings and altitudes.

(c) If a pilot cannot abide with an ATC instruction or clearance, he/she should notify ATC immediately.

4. Follow-up meetings (“HOW GOES IT” type) must be conducted.

### 12-1-3. TRSA

a. TRSAs are not officially designated by airspace action and were established solely to define an area within which a separation service will be provided. Therefore, at all TRSA locations it is intended that facilities must provide the full extent of TRSA services throughout the entire advertised TRSA area. Although the TRSA area extends downward to the surface within the surface area of Class D airspace at the primary airport, a base should be established outside this surface area of Class D airspace to permit free movement of nonparticipating aircraft. The base of the TRSA must not be below the base of an associated Class E airspace.

b. The size and shape (laterally/vertically) of the TRSA will vary depending upon operational requirements. However, each TRSA must reflect the most efficient and reasonable configuration to contain large turbine-powered aircraft while achieving a higher level of overall safety.

#### **NOTE-**

*There is no requirement for the TRSA facility to retain operational jurisdiction of the airspace in its entirety if another facility can more effectively manage a particular portion of the airspace. The requirement is that the system provides the required service.*

c. All IFR procedures used by large turbine-powered aircraft arriving and departing designated

airports must be fully contained in the TRSA. Each TRSA should be configured to ensure the most efficient use of airspace.

d. Arriving and departing large turbine-powered aircraft should enter/exit the TRSA through the ceiling. However, arriving aircraft at altitudes below the ceiling are not required to climb to achieve this objective, nor are departing aircraft filed at lower altitudes.

### 12-1-4. CLASS C AIRSPACE

Class C airspace must be officially designated by airspace action in 14 CFR Part 71 and is established solely to define the airspace in which all aircraft are subject to operating rules and equipment requirements specified in 14 CFR Part 91.

#### **NOTE-**

*While the regulatory nature of this airspace requires pilots to establish two-way communications with ATC prior to entering, aircraft should not be unnecessarily prohibited from entering Class C airspace.*

a. Facility managers who determine a need for Class C airspace establishment must prepare and submit a staff study in accordance with FAA Order JO 7400.2, Procedures for Handling Airspace Matters.

b. The physical dimensions of the Class C airspace will normally be a 10 NM radius capped at 4,000 feet above the primary airport elevation. This airspace must extend no lower than 1,200 feet above the surface, except that an inner core with a 5 NM radius must extend down to the surface.

c. Encompassing each Class C airspace must be a site specific Outer Area with a normal radius of 20 NM. The Outer Area must extend outward from the primary Class C airspace airport and extend from the lower limits of radar/radio coverage up to the ceiling of the approach control delegated airspace excluding the Class C airspace and other airspace as appropriate.

d. After issuance of the final rule designating a Class C airspace, user education meetings must be held to publicize implementation of Class C service to as many pilots as practicable.

e. Issue a letter to airmen explaining the program and including a drawing of the Class C airspace. The drawing should depict, as a minimum, the following:

1. The lateral and vertical dimensions of the Class C airspace and the associated Outer Area.



## Section 4. Helicopter Route Chart Program

### 12-4-1. POLICY

a. The Helicopter Route Chart Program has been established to enhance helicopter access into, egress from, and operation within high density traffic areas by depicting discrete and/or common use helicopter routes, operating zones, and, where necessary, radio frequencies. The program had been designed to improve operational safety in areas where significant helicopter operations occur, and to establish a systematic process for chart development, modification, and acquisition.

b. Pilot adherence to charted helicopter routes and the recommended altitudes or flight ceilings associated with them will normally be voluntary. However, controllers may assign charted routes and altitudes and expect or request pilot compliance with them, provided such procedures are called for in specific FAA-operator Letters of Agreement, or are necessitated by traffic density and/or safety considerations; controllers also may restrict operations within designated operating zones when requested by local law enforcement officials and the restriction would not adversely affect other aircraft operations.

c. Helicopter route charts are published individually, on a 56-day cycle.

### 12-4-2. DEFINITION

Helicopter Route Charts are graphic portrayals of discrete and/or common use helicopter routes and/or operating zones located in high density traffic areas; their purpose is to facilitate helicopter pilot access into, egress from, or operation within charted areas. They generally will include associated altitude or flight ceiling information to facilitate IFR traffic avoidance and pilot adherence to minimum safe altitude requirements. The charts provide expanded, and in some cases unique, ground reference symbology to improve visual navigation.

### 12-4-3. CRITERIA

Use the following criteria when determining the need for a new or revised helicopter route chart:

a. Routes:

1. Recommended altitudes/flight ceilings/floors must avoid restricted/military airspace requiring prior authorization or clearance to enter.

2. All routes depicted on a helicopter route chart must, to the maximum extent practicable, reference ground objects that can be readily identified from the air.

b. Operating zones: Airspace encompassed by a helicopter route chart must, when necessary and required by operational considerations, be divided into a sufficient number of operating zones or sectors to permit local law enforcement agencies to operate within them on an exclusive basis.

c. Altitudes and flight ceilings/floors: Each segment of a helicopter route may contain recommended altitudes or flight ceilings/floors. It is the discretion of the local air traffic tower if such altitudes will be depicted, or, assigned at a later date when the pilot contacts the tower.

1. Recommended altitudes/flight ceilings/floors must avoid airspace requiring prior authorization or clearance to enter.

2. Care should be exercised to avoid recommending altitudes or flight ceilings/floors which could cause helicopters operating on a designated route to encounter inflight wake turbulence generated by large, fixed wing traffic.

3. When altitude/flight ceiling changes are required, they should be based on a descent rate of 250–350 feet per nautical mile.

d. Communications information: Each helicopter route chart must include sufficient radio communications information to permit pilot compliance with all pertinent regulatory requirements, and facilitate the acquisition and dissemination of air traffic advisory information.

e. Military considerations: Avoid establishing helicopter routes or operating zones which would conflict with military ground control radar approach paths. When charting a route or operating zone which crosses or is located in close proximity to a MTR, include communications instructions that will permit pilots to determine the status of the MTR.

f. Helicopter routes may be changed or modified whenever a new chart is updated. It is recommended

that all route modifications be coordinated with operating groups in the local area.

#### **12-4-4. RESPONSIBILITIES**

**a.** Helicopter route chart development: Facility air traffic managers are responsible for determining the need for chart development or revision, and for compliance with the following:

**1.** Initial action: Facility air traffic managers who desire to establish a new route chart or revise an existing chart must establish a task force or planning group comprised of local air traffic, FSDO, military, law enforcement, and helicopter operator personnel to recommend the area of chart coverage and the paths, routes, and operating zones that will comprise it.

**2.** Justification: All recommendations for new and/or revised charting must include justifying information that includes, as a minimum, the following information:

**(a)** Background information pertinent to chart development or revision, including the composition of the task force or planning group;

**(b)** The airspace areas and proposed routes, operating zones, and altitude/flight ceiling/floor considerations examined;

**(c)** Special VFR procedural implications;

**(d)** Task force or planning group recommendations; and

**(e)** Supporting rationale.

**3.** Charts and description: Facility air traffic managers must provide a narrative description or drawing of the chart area, including:

**(a)** Identification of all integral routes or operating zones, with named visual checkpoints and elevations, and associated altitude or flight ceiling limitations;

**(b)** Any IFR routes that fall within the charted area;

**(c)** Procedural notes pertinent to operations within the charted area or an operating zone, and on designated routes; and

**(d)** Traffic advisory radio communications frequencies and ATC facility names associated with area, route, or zone operations.

**b.** Chart approval: Terminal Operations Service Area Directors are responsible for reviewing and approving new or revised helicopter route chart proposals, and assuring that they comply with all prescribed criteria. However, procedural implementation may not occur until the proposal has been reviewed by System Operations Airspace and Aeronautical Information Management, and subsequently published. Consequently, managers should forward their approved packets through System Operations Airspace and Aeronautical Information Management as far in advance of the desired publication/implementation date as possible.

**NOTE-**

*The publication lead times for new charts and minor chart revisions will routinely approximate 6-9 months and 3-4 months, respectively.*

**c.** Annual review: Terminal Operations Service Area Directors are responsible for the conduct of annual reviews of existing VFR helicopter route charts to determine their accuracy and continued utility.

**d.** Chart revisions:

**1.** Revisions to existing helicopter route charts may be initiated by any facility air traffic manager, but can only be approved by the Terminal Operations Service Area Directors. However, to assure completion of all requisite Airspace and Rules review and publication requirements, proposals must be submitted through System Operations Airspace and Aeronautical Information Management to Airspace and Rules at least 6-9 months or 3-4 months (as appropriate) prior to their expected or recommended implementation date.

**2.** The following are considered sufficient justification for a revision:

**(a)** Changes, additions, or deletions to area coverage, designated routes or operating zones, controlling agencies and/or frequencies, procedural notes, or airport/heliport/helistop status;

**(b)** Changes in IFR routes within the chart coverage area; and

**(c)** Additions or deletions to visual checkpoints.

**e.** Publicity: Facility air traffic managers must seek the cooperation of local FSDO personnel in

informing local aviation interests about the Helicopter Route Chart Program. Special emphasis should be placed on:

- 1.** The voluntary nature of pilot adherence to designated routes, operating zones, altitudes/flight

ceilings, and procedural notes;

- 2.** The importance of chart use to operational safety and IFR traffic avoidance; and

- 3.** The “see and avoid” nature of operations within the chart area.



## Section 6. Standard Terminal Automation Replacement System (STARS)

### 12-6-1. OPERATIONAL USE

- a. Do not use STARS data when the system is released to Technical Operations Services.
- b. Verify the operational status of all STARS components daily.
- c. Advise affected facilities when STARS equipment will not be operational at normal startup time, when it fails, is shut down, resumes operation, or when interfacility mode is lost/regained.

### 12-6-2. DATA ENTRIES

Facility directives must prescribe the use of the scratch pad and the specific responsibility for entering the current ATIS alpha character, the current general system information (GSI), and the system altimeter setting. When a STARS facility serves more than one controlled airport, an average of the altimeter settings for those airports may be specified as the system altimeter setting. A remote altimeter setting may be used in accordance with paragraph 2-10-4, Comparison Checks, in the event that all local altimeter indicators fail. Do not use this procedure whenever conditions indicate the probability of a steep pressure gradient between two locations.

### 12-6-3. DISPLAY DATA

- a. When a malfunction causes repeated discrepancies of 300 feet or more between the automatic altitude readouts and pilot reported altitudes, request Technical Operations personnel to inhibit the automatic altitude report (Mode C) display until the malfunction has been corrected.
- b. Display Mode C on untracked (unassociated) targets within each controller's area of responsibility by setting the altitude filters to encompass all altitudes within the controller's jurisdiction. Set the upper limits no lower than 1,000 feet above the highest altitude for which the controller is responsible. In those stratified positions, set the upper and lower limit to encompass at least 1,000 feet above and below the altitudes for which the controller

is responsible. When the position's area of responsibility includes down to an airport field elevation, the facility will normally set the lower altitude filter limit to encompass the field elevation, so that provisions of FAA Order JO 7110.65, Air Traffic Control, paragraph 2-1-6, Safety Alert, and subparagraph 5-2-14a2, Validation of Mode C Readout, may be applied. Air traffic managers may authorize the temporary suspension of this requirement when target clutter is excessive.

#### REFERENCE-

FAA Order JO 7110.65, Para 5-2-21, Altitude Filters.

### 12-6-4. USE OF STARS QUICK LOOK FUNCTIONS

- a. When operational benefits are gained by using the QUICK LOOK function, specify the following in a facility directive or an LOA:

1. Procedures for data transfer between the TRACON and the tower cab.
2. Communications changeover points.
3. Transfer of control points.
4. Hours or conditions under which facility policy prohibits use of these functions.
5. The responsibility of the local control position to determine whether use of QUICK LOOK function is satisfactory or some other mode of data transfer is to be used; e.g., voice call or computer handoff.

- b. Factors to be considered by the controller in determining use of the QUICK LOOK function and by the facilities for prohibiting their use include, but are not limited to, light on the face of the TDW or supplemental display, traffic volume, other duties requiring the controller's attention, and the number of controllers available in the tower.

### 12-6-5. AUTOMATION PROGRAM CHANGES

The air traffic manager of STARS facilities must:

- a. Approve all requests for automation changes sent to the respective Operational Support Facility

via the National Automation Request form, FAA Form 6000–14.

**b.** Review each SITE PROGRAM BULLETIN (TERMINAL) issued by the Terminal Automation Support for local program functionality, and changes to the data base to determine any operational/procedural impact. When necessary:

**1.** Issue a facility directive describing the functional change/s and any resulting procedural change/s.

**2.** Coordinate any functional, procedural, and airspace change/s with the ARTCC providing automation interface.

**c.** Ensure that operational suitability acceptance for software modifications is recorded on FAA Form 7230–4.

**EXAMPLE–**

*“National operating system suitability testing completed, acceptable.”*

## **12–6–6. AUTOMATIC ACQUISITION/TERMINATION AREAS**

**a.** Facility air traffic managers must:

**1.** Establish automatic acquisition areas for arrivals and overflights at ranges permitting auto-acquisition of targets prior to the ARTCC/STARS-to-STARS automatic handoff area.

**2.** Coordinate with the adjacent automated facilities to ensure that computer handoffs will only be initiated after the aircraft is within their facility's automatic acquisition area. Where this is not feasible due to airspace assignment, facility directives must require the use of an appropriate procedure specified in FAA Order JO 7110.65, Air Traffic Control, to confirm the identity of all aircraft handed off prior to auto-acquisition.

**3.** Establish automatic acquisition areas for departing aircraft 1 mile or less from the runway end.

**4.** Establish automatic termination areas for arriving aircraft 1 mile or less from the runway threshold or, at satellite airports, the minimum radar coverage range/altitude whichever is greater.

**5.** Prescribe in a facility directive the operating position responsibility for determining if automatic acquisition of a departure track has occurred.

**NOTE–**

*This is intended for operations where automatic acquisition responsibility could be confused, e.g., uncontrolled airports within a single sector, or between different radar sectors that serve the same airport.*

**b.** The appropriate Service Area Director of Air Traffic Operations, may authorize a distance greater than specified in subparagraphs 3 and 4 above, where the operational conditions dictate.

## **12–6–7. MINIMUM SAFE ALTITUDE WARNING (MSAW) AND CONFLICT ALERT (CA)**

**a.** Facility air traffic managers may temporarily inhibit the MSAW, the Approach Path Monitor portion of MSAW, and/or the CA functions when their continued use would adversely impact operational priorities. Inform the appropriate Service Area Director of Air Traffic Operations when equipment or site adaptation problems preclude these functions from being used.

**b.** Facility air traffic managers are authorized to inhibit CA at specific operating positions if an operational advantage is gained.

**c.** MSAW General Terrain Maps (GTMs) must be kept current.

**d.** Facility air traffic managers must ensure that:

**1.** The magnetic variation of the facility's MSAW GTM coincides with the magnetic variation of the facility's adapted radar site settings.

**NOTE–**

*The DTM is constructed to align with the radar antenna offset for magnetic north. Consequently, any change in antenna offset will result in a corresponding change in relative positions of the terrain points and obstacles used to determine DTM bin altitude assignments. This will require not only generating and verifying a new DTM, but also readapting the MSAW and CA data bases; e.g., airport areas, inhibit volume areas, capture boxes, etc., to coincide with the changed declination.*

**2.** MSAW parameters are modified, as appropriate, to minimize the extent of inhibit areas as specified in the Standards and Guidelines for STARS.

**3.** An aural test of the MSAW speakers located in the operational quarters is included as part of the equipment checklist required during each watch. The purpose of this test is to ensure the aural alarm is functioning and audible to the appropriate operational personnel.

## Part 4. FLIGHT SERVICE STATIONS

### Chapter 14. Flight Service Operations and Services

#### Section 1. General

##### 14-1-1. OPERATING POSITION DESIGNATORS

a. The following designators may be used to identify operating positions in an FSS. (See TBL 14-1-1.)

*TBL 14-1-1*

**Operating Position Designators**

	Designator	Position
1.	FD	Flight Data
2.	IF	Inflight
3.	N	NOTAM
4.	OM	Operations Manager
5.	OS	Operations Supervisor*
6.	PF	Preflight
7.	WO	Weather Observer

\*The Operations Supervisor (OS) position may be staffed by an Operations Supervisor, a Controller-in-Charge (FAA) or Designated Lead Specialist (FCFSS).

b. Facility managers may use designators other than those listed to accommodate local situations.

##### 14-1-2. TEMPORARY FSS

a. Employ temporary FSSs to assure that the aviation public is afforded adequate services. Temporary facilities may be established when requested by flying organizations, cities, and other political subdivisions to assist in the operation of fly-ins, air races, etc.

b. Each request for a detail of FAA personnel and/or equipment should be carefully considered with regard to the actual need for the service. When it is determined that the service is required and that the required personnel/equipment can be made available without jeopardizing FAA activities, Flight Services Operations Service Area Offices should accede to the request.

##### 14-1-3. FLIGHT PLAN AREA

The Chart Supplement U.S. lists each public-use airport and its associated FSS. As changes occur, determine the flight plan area assignments as follows:

a. The Flight Service Safety and Operations Group must assign a new airport to the nearest FSS regardless of regional boundaries. This criterion must also be used as the determining factor for establishing flight plan areas or airport reassignments associated with FSS commissioning, decommissioning, or functional changes.

b. Make adjustments to the flight plan area assignment through interfacility coordination with Flight Services Safety and Operations Group approval.

c. Where databases are shared, facility managers may develop local procedures to facilitate the handling of flight data across flight plan area boundaries.

##### **EXAMPLE-**

*An aircraft departs Dillingham but activates a VFR flight plan with Kenai Radio. Since both facilities share a database, Kenai may activate the flight plan, providing local procedures have been developed.*

##### 14-1-4. ICSS INTRODUCTORY ANNOUNCEMENT

a. FSS facilities using ICSS equipment must provide an introductory announcement to alert pilots they are accessing the ICSS system.

##### **EXAMPLE-**

*WELCOME TO THE (facility name) FLIGHT SERVICE STATION. FOR FLIGHTS OUTSIDE OF UNITED STATES CONTROLLED AIRSPACE, CHECK DATA AS SOON AS PRACTICAL AFTER ENTERING FOREIGN AIRSPACE, AS OUR INTERNATIONAL DATA MAY BE INACCURATE OR INCOMPLETE. ADVISE THE BRIEFER YOU HAVE THE INTERNATIONAL CAUTIONARY ADVISORY. TOUCH-TONE USERS MAY PRESS (appropriate code) FOR A BRIEFER OR (appropriate code) FOR THE MAIN MENU OF*

*SERVICES. IF YOU ARE USING A PULSE OR ROTARY TELEPHONE, PLEASE REMAIN ON THE LINE AND YOUR CALL WILL BE SEQUENCED FOR THE NEXT AVAILABLE BRIEFER.*

**b.** Newly commissioned facilities may expand the introductory announcement to include additional access instructions until users become familiar with

the system— for a period not to exceed 6 months from the date of system commissioning.

**c.** With Flight Service Safety and Operations Group approval, facilities may add additional menu instruction for special purpose requirements, for example, coastal routes.



## Section 2. Position/Service Information Binders

### 14-2-1. RESPONSIBILITY

a. The air traffic manager must provide position binders, or electronic equivalent, to include, but not be limited to, procedures for accomplishing position related duties and responsibilities as outlined below. Additionally, examples and formats must be included for seldom-used procedures. Cross-references to documents and lists contained in other publications may be used where applicable. The air traffic manager may assign those functions, detailed below, to the appropriate position(s) as facility needs dictate but must provide those items appropriate for each position in the binders.

b. The air traffic manager must retain one copy of the completed facility standard operating procedures directive in the operations area and distribute applicable sections to the positions to which they apply.

### 14-2-2. BOUNDARIES

Flight Plan Area: Provide a narrative and/or graphic depiction of the flight plan area. This includes areas covered when accepting flight plan responsibility for part-time facilities.

### 14-2-3. POSITIONS/SERVICES

#### a. Pilot Briefing:

1. List and/or specify preflight briefing display.
2. Specify flight plan handling procedures.

#### b. In-Flight:

1. Document aircraft contacts.

2. List control frequencies/dial code information.

3. Specify local airport advisory/remote airport information service (RAIS)/remote airport advisory (RAA) procedures.

4. Specify SVFR procedures.

5. Specify aircraft orientation/emergency procedures.

6. Specify PIREP handling procedures.

7. Specify procedures for altimeter check.

#### c. NOTAM Handling:

1. List authorized sources/telephone numbers. Data may be stored and displayed electronically, where available.

2. Specify NOTAM dissemination procedures.

3. Specify NOTAM currency/display procedures.

#### d. Flight Data:

1. Specify military flight plan handling/coordination procedures.

2. Specify notification procedures for military training activities, including MTRs and MOAs.

3. Specify IFR/Defense VFR (DVFR), ADIZ, Canadian, Mexican, and ICAO procedures with examples.

4. Specify customs notification procedures.

5. Specify search and rescue notification procedures.

6. List airport search/contact telephone numbers.



## Section 3. Operations

### 14-3-1. AIRPORT CONDITION FILE

Maintain a current file of all public use civil landing areas within the FSSs flight plan area. Post the latest available information regarding airport conditions and facilities on the current FAA Airport Master Record (FAA Form 5010-1). Review the National Flight Data Digest, and post changes not previously received.

### 14-3-2. LANDING AREA STATUS CHECKS

To the extent that their operational duties permit, FSS air traffic managers are encouraged to visit airports and to contact airport managers. Operational changes in airport conditions, facilities, or services that are observed by or reported to the FSS must be transmitted to System Operations Airspace and Aeronautical Information Services.

### 14-3-3. LIAISON VISITS

As practicable:

a. Visit attended landing areas at least once each year. Visit unattended fields at the discretion of the FSS air traffic manager. Rotate liaison visits among professional level specialists.

b. Make familiarization flights over the FSSs flight plan area and particularly the area within 100 miles of the station. This will enable specialists to acquire and maintain knowledge of the landmarks and the facilities used in aircraft orientation and pilot briefings. Combine familiarization flights and liaison visits as practicable.

### 14-3-4. DUTIES

Typical duties for liaison visits and familiarization flights include:

- a. Acquiring knowledge of airports, facilities, and topography.
- b. Becoming familiar with landmarks.
- c. Becoming familiar with the operation of aircraft equipment and navigation procedures.
- d. Discussing FAA services.
- e. Checking arrangements for handling NOTAMs.
- f. Checking arrangements for the search of airports for missing aircraft.
- g. Checking arrangements for alerting airport emergency equipment.
- h. Checking the listing of airports and other facilities in aeronautical publications and their depiction on aeronautical charts.
- i. Collecting information for the Airport Condition File and the aircraft orientation board.
- j. Ascertaining the number of based aircraft and/or itinerant operations for planning FX or other communications needs to the associated FSS.
- k. Obtaining pilots' opinions of the services provided by the station.
- l. Practicing aircraft orientation procedures.

### 14-3-5. TIE-IN NOTAM RESPONSIBILITY

Tie-in FSSs must make arrangements with other agencies and facilities (NWS, U.S. Army, control tower, etc.) for the proper exchange of NOTAM information.



# Chapter 15. Aviation Meteorological Services and Equipment

## Section 1. General

### 15-1-1. FAA-NWS AGREEMENT

By interagency agreement, FAA and NWS cooperate in providing aviation meteorological services to the aviation public. This cooperation is designed to provide maximum service within the combined capabilities of the two agencies.

### 15-1-2. CERTIFICATES OF AUTHORITY

a. FSS personnel must obtain a certificate of authority from the FAA before performing the following functions:

1. Weather observing.
2. Pilot weather briefing.

#### REFERENCE-

FAA Order JO 7220.4, *FAA Certification of Pilot Weather Briefing*.

### 15-1-3. LIAISON WITH AVIATION INTERESTS

a. Because of their aviation service responsibilities, FSS supervisors should establish and maintain cordial relations with aviation interests within their flight plan areas. They should keep apprised of aviation users' weather and aeronautical information needs and assist them in making effective use of the available services. This liaison should include other FAA facilities, NWS facilities, airport management, airline and military operations offices, fixed base operators, pilot organizations, and Civil Air Patrol (CAP).

b. Some aviation operations (e.g., emergency medical flights) require time critical services. Immediate dispatch of the mission is imperative and delays in obtaining required weather and aeronautical information may be life endangering. FSS managers must cooperate to the fullest extent possible with organizations making requests for special arrangements to satisfy their requirement.

### 15-1-4. TELEPHONE LISTINGS

FSS air traffic managers must ensure that appropriate telephone numbers are properly listed in telephone directories (including yellow pages when applicable) and in the Chart Supplement U.S. In Alaska, include Fast File in local directories where that service is available. Numbers should always be listed under the subheading Flight Service Station under United States Government, Department of Transportation, Federal Aviation Administration. When possible, list the primary pilot weather briefing number under the Frequently Requested Numbers section at the beginning of United States Government listings.

#### EXAMPLE-

United States Government  
Department of Transportation  
Federal Aviation Administration  
Flight Service Station  
(Address)  
Pilot Weather Briefing <sup>1</sup>  
Fast File Flight Plan  
Facility Supervisor <sup>2</sup>

/1/ Parent FSS number for part-time FSSs.

/2/ Administrative number.

### 15-1-5. MINIMUM WEATHER EQUIPMENT

FSSs taking basic weather observations must have:

- a. A ceilometer (balloons and ceiling lights are acceptable until replaced).
- b. A hygrothermometer and a sling psychrometer for use in the event the hygrothermometer is inoperative.
- c. A wind direction and speed system. (A gust recorder, if required, will be furnished by NWS.)
- d. A standard 8-inch rain gauge (furnished by NWS if the station reports precipitation).
- e. An altimeter setting indicator and a traceable pressure standard. (A barograph, if required, will be furnished by NWS.)

**15-1-6. SUPPLY-SUPPORT**

Equipment used exclusively for aviation observations will be procured, installed, operated, maintained, and supply-supported by FAA. Observational equipment; e.g., AWOS/ASOS systems, Stand Alone Weather Sensors (SAWS), etc., serving multiple NWS/FAA purposes will be

procured, installed, maintained, and supply-supported by NWS unless otherwise agreed to. To the maximum extent possible, each agency should avail itself of the facilities offered by the other in contracting for, installing, maintaining, and supply-supporting observational equipment on a non-reimbursable basis where appropriate.

## Section 2. Pilot Weather Briefing

### 15-2-1. BRIEFING RESPONSIBILITY

FSSs are responsible for providing weather briefings to users of aviation weather information calling in person, by radio, or telephone. These briefings are fulfilled by direct application or interpretation of NWS guidance forecasts supplemented by the latest observations and pilot reports.

### 15-2-2. WEATHER CHART DISPLAY

Some of the more useful weather charts for pilot weather briefings are: surface and upper air analysis, freezing level analysis, stability index analysis, radar depiction, weather depiction, surface and upper air prognosis, significant weather (high and low level) prognosis, and maximum wind and wind shear analysis and prognosis. Weather chart displays should include but not necessarily be limited to these charts.

### 15-2-3. TELEVISION EQUIPMENT

Closed circuit television equipment (CCTV) is available in a number of high-activity FSSs. Facilities should use the equipment to display weather graphic information. Facilities that have additional television cameras available, after graphics requirements are met, may display alphanumeric data.

### 15-2-4. FLIGHT PLANNING DISPLAY

Maintain flight planning displays in FSSs and other locations, as appropriate, convenient for pilot use. Such displays include:

- a. Aeronautical charts covering the flight plan area that depict military training routes.
- b. A planning chart with a means for measuring distances and plotting courses.
- c. Chart Supplement U.S., NOTAM publication, and Aeronautical Information Manual.
- d. Army Aviation Flight Information Bulletin.
- e. DOD IFR En Route Supplement and DOD VFR Supplement.

#### REFERENCE—

FAA Order JO 7210.3, Para 15-2-6, Military Training Activity.

- f. Drawing of the local airport.
- g. Sunrise and sunset tables.
- h. Aero computer.
- i. Pilot chart working area.

### 15-2-5. FLIGHT PLANNING FORMS

FSS facility managers must assure FAA Form 7233-4, International Flight Plan, and/or Form 7233-1, Flight Plan, as needed, are available in the pilot briefing area for use by pilots. Maintain a sufficient supply to provide additional copies, as needed, to pilots, aviation companies, and organizations on request.

### 15-2-6. MILITARY TRAINING ACTIVITY

Ensure that the current DOD General Planning (GP), DOD Flight Information Publication (FLIP), Special Use Airspace (AP/1A), Military Training Route (AP/1B), and associated charts are readily available for preflight briefings to pilots:

- a. Post the DOD FLIP chart, or that portion covering at least the flight plan area plus a 100 NM extension of the FSSs existing flight plan area.
- b. Publicize new or revised MTRs and MOAs through letters to airmen, pilot meetings, and where practicable, “handouts” charting the routes/areas within the FSS flight plan area and the 100 NM extension of the existing flight plan area.

### 15-2-7. TRANSFER OF BRIEFERS

- a. A pilot weather briefer transferring from one briefing assignment to another or returning to a pilot weather briefing position after a break of 3 months to 1 year in the performance of briefing duties is required to obtain a reorientation check before performing pilot weather briefing duties.
- b. A pilot weather briefer returning to briefing duties after an absence of more than 1 year from briefing duties is required to be re-qualified by means of an oral examination by the FAA.





## Section 3. Broadcasts

### 15-3-1. STATION BROADCASTS

Facility air traffic managers must select the specific reports to be included in the Scheduled Weather Broadcast (SWB). Include a sufficient number of reports to serve the users' needs. The selection of the reports and any proposed changes must be coordinated with known users of the station broadcast. The reports should be broadcast in clockwise order, beginning with the report nearest to but east of true north from the broadcast station. Changes may be implemented immediately unless prior Flight Service Safety and Operations Group approval is required.

### 15-3-2. COMMERCIAL BROADCAST STATIONS

Requests to broadcast scheduled or transcribed weather broadcasts which may be useful to the

aviation community may be approved on an individual basis provided:

- a. Any such request is coordinated with the FAA and the NWS regional office before approval.
- b. The radio station identifies the source of the information.
- c. The broadcast is confined to within 1 hour of the time announced on the SWB.
- d. If feasible, the broadcast is not identified or associated with a sponsor. The FAA and the NWS prefer such a program be carried as a public service feature of the standard broadcast station.
- e. FAA personnel must not make direct or recorded broadcasts regularly over a standard broadcast station. A waiver to this policy must be approved by the respective Flight Service Safety and Operations Group and the Vice President of Flight Services.



# Chapter 16. Equipment

## Section 1. General

### 16-1-1. RESPONSIBILITY

FSS air traffic managers must identify requirements for new and replacement equipment and facilities by budget submission.

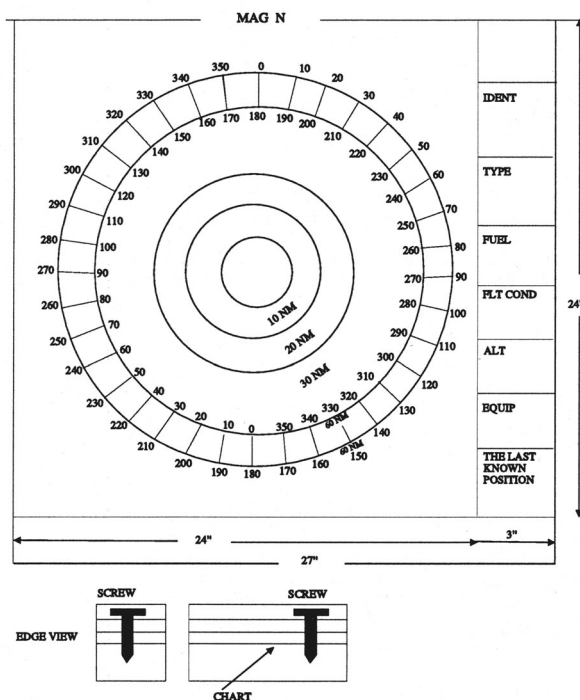
**NOTE—**

*Not applicable to contract facilities.*

### 16-1-2. AIRCRAFT ORIENTATION PLOTTING BOARD

FIG 16-1-1

Example of a Standard Aircraft Orientation Plotting Board



Maintain an aircraft orientation plotting board (see FIG 16-1-1), parallel rulers, plotters, and fine-line china marking pencils for use in aircraft orientation. Record pertinent information directly on the board using the marking pencils. After the orientation is

completed, transfer the information from the plotting board to official forms for record purposes.

### 16-1-3. ORDERING OVERLAYS

a. Compass Rose Clear Plastic Overlays. When ordering the overlays, use the following National Stock Numbers (NSN):

1. VOR 3-inch compass rose:  
NSN 5220-01-062-8231.

b. Requests for aircraft orientation plotting board and compass rose overlays should be forwarded to:

FAA Mike Monroney Aeronautical Center  
P.O. Box 25082  
Oklahoma City, Oklahoma 73125

c. Items must be ordered by using one of the following three methods:

1. LIS System: NSELITE System through Service Area office; must have NSN, user ID and password, supply support code (SSC), facility type (equipment application), and facility location identifier.

2. IMPART: [www.impart.faa.gov](http://www.impart.faa.gov); must have NSN, user ID and password, facility location identifier.

3. FAA Logistics Center, Customer Care Center—(405) 954-3793 or 1-888-322-9824; must have NSN or part number, supply support code (SSC), equipment application, facility location identifier.

### 16-1-4. LEASED EQUIPMENT SUPPLIES

OASIS. The vendor provides a basic quantity of consumable supplies on a yearly basis. The FAA must provide anything beyond this basic allotment.



# Chapter 17. Facility Statistical Data, Reports, and Forms (Alaska Only)

## Section 1. General Information

### 17-1-1. FORM USAGE

a. Flight Service Stations must use FAA Form 7230-13, or electronic equivalent, daily for recording in-flight, flight plan, and pilot briefing activity.

**REFERENCE-**

FAA Order JO 7210.3, Para 17-5-2, Distribution and Amendment.

**TBL 17-1-1**

**National Activity Summarization**

Type of Activity	Required Breakdown	
	Type of Service Involved	Category of Use
Aircraft contacted	IFR/DVFR/SVFR (grouped) VFR	AC, AT, GA, MI
Flight plan count	IFR & DVFR (grouped) VFR	No breakdown required
Pilot briefs		No breakdown required

b. A minimum amount of information regarding FSS activity, suitably broken down, is required to determine manpower requirements and for budgetary

and personnel matters. There is a need for national summarization monthly of the above activity: (See TBL 17-1-1.)

### 17-1-2. TOTAL FLIGHT SERVICES FORMULA

Total Flight Services have historically been and continue to be used as a measurement of the overall activity of individual FSSs. Total Flight Services are based on the following formula:

Total Flight Services equal two times pilot briefs plus two times flight plans originated plus aircraft contacted.

**NOTE-**

*Total Flight Services are not to be confused with the Flight Service Activity Factor, which is used for facility grade level determination and reclassification purposes. The present classification criteria and related formula for the Flight Service Activity Factor are contained in the GS-2152 position-classification standard issued by Civil Service Commission (CSC) (now Office of Personnel Management (OPM)) in June 1978.*



## Section 2. Aircraft Contacted

### 17-2-1. AIRCRAFT CONTACTED

a. Maintain data on the following categories of aircraft operations:

1. Air Carrier: Operations by aircraft identified in Appendix 3 which use three-letter company designators.

2. Air Taxi: Operations by aircraft other than those identified in Appendix 3 which use three-letter company designators or the prefix "TANGO."

**NOTE-**

*Air Taxi operators who do not have a FAA issued designator have been authorized to use the prefix "TANGO."*

3. Military: All classes of military operations.

4. General Aviation: Civil operations which are not classified under "air carrier" or "air taxi."

b. One count must be taken for each flight contacted regardless of the number of contacts made with the aircraft during the same flight.

**NOTE-**

*For aircraft contacted purposes, a flight is considered to be in progress from the time taxiing is begun until it has landed and parked.*

c. One aircraft contacted count must be taken when relaying IFR departure clearances or ATC instructions via telephone, "data communication circuits," or interphone. Subsequent radio communications must not be the basis for an additional aircraft contacted count.

### 17-2-2. LOCAL AIRPORT ADVISORY (LAA)/REMOTE AIRPORT ADVISORY (RAA)/REMOTE AIRPORT INFORMATION SERVICE (RAIS)

In addition to the aircraft contacted count, airport advisory/remote advisory/remote information activity must be determined as follows:

a. One airport advisory/remote advisory/remote information service count must be taken for each separate inbound or outbound aircraft operation if the pilot acknowledges receiving the information.

b. Touch-and-go operations are considered to consist of a separate inbound and outbound phase. One count must be taken during the inbound phase, and an additional count must be taken for the outbound phase if LAA/RAA/RAIS is performed during each phase.

c. Although aircraft making practice instrument approaches do not normally land, they should be counted under the same criteria as touch-and-go operations.

### 17-2-3. RADIO CONTACTS

Count radio contacts in addition to numbers of aircraft contacted. A radio contact includes the initial radio call-up, a complete interchange of information, and a termination of the contact. A radio contact count must not be taken for a contact which is included in the LAA/RAA/RAIS count.





## Section 3. Flight Plan Count

### 17-3-1. FLIGHT PLAN COUNT

The first FAA station which receives a flight plan, a Special VFR clearance request, or a flight plan change en route (regardless of source: e.g., pilot or his/her representative, foreign location, military operations office, state aeronautical communications station, air carrier, etc.) must take one count for each one received except:

- a. Do not count flight plans received from or relayed by means of an automatic or semi-automatic installation even though the station is the first FAA station to receive same.
- b. Do not count minor changes, such as cancellations, closures, or amendments, that do not change the destination. The change must result in the transmission of a flight notification message to be countable.
- c. Do not count prefilled flight plans unless the operator has requested activation.

### 17-3-2. ADDITIONAL ITEMS

Flight plans are to be counted without regard to the elapsed time or the distance of the flight or the fact that the flight terminates at the same place from which it departed.

### 17-3-3. FLIGHT PLAN CHANGE EN ROUTE

A flight plan change en route to be countable must be a plan which is substantially modified or extended, such as a route or destination change, and the aircraft continues on a flight plan. The change must result in the transmission of a flight notification message to be countable.

### 17-3-4. FLIGHT PLAN FORMS

Use FAA Forms 7233-1 (DOD only) or 7233-4, as appropriate, to record flight plans copied by specialists. ■ ■



## Section 4. Pilot Briefing Count

### 17-4-1. PILOT BRIEFING COUNT

A pilot brief is the dissemination of meteorological and aeronautical data pertinent to the pilot's requirement for an intended flight. The intent is to give one count for each pilot briefed regardless of the length of time spent or of multiple routes or destinations. Take a briefing count for:

a. Delivery of an in-flight weather advisory (SIGMET, AIRMET) when the pilot states he/she has not previously received the information.

b. Significant information furnished which results in the pilot altering, diverting, or canceling his/her flight.

c. Each briefing as defined above and not counted under subparagraphs a or b.

**NOTE—**

*Do not take a count for a response to a request for a single item of information; e.g., surface weather report, airport*

*conditions at a single location, or the status of a single NAVAID. Also, information not pertinent to the route of flight must not be volunteered to meet the criteria for a briefing count nor must information routinely given during radio contact with an aircraft be used for this purpose: e.g., altimeter setting, LAA information, etc.*

d. Instructions for recording pilot briefing count for FCFSS facilities are contained in contractor requirement documents.

### 17-4-2. RETENTION OF FORMS CONTAINING PILOT BRIEFING (“PB”) DATA

In non-automated FSSs retain FAA Forms 7233-1, 7233-3, and 7233-5 containing “PB” data in a station's files for 15 days except when an incident or an accident occurs where a briefing may have a bearing. In this case, include the form as a part of the accident/incident report.



## Section 5. Other Reports and Information

### 17-5-1. COMPLETION OF MONTHLY ACTIVITY RECORD

**a.** This form is to be completed by all FSSs. All computerized, or automated versions of FAA Form 7230-13 must be pre-approved by the Office of Aviation Policy and Plans, Planning Analysis Division, Statistics and Forecast Branch, APO-110, prior to use.

**b.** Enter daily totals for each applicable category on the daily activity record. Leave sections that do not apply to an individual facility blank. Any time there is an equipment failure, and actual figures are unavailable, provide estimated figures where appropriate. Annotate such estimates in the “Reserved” column on side 2 of the form.

**c.** To facilitate automatic data processing, complete the header and the monthly total rows on both sides of the form. Follow the instructions below to complete the form:

**1.** Facility Name: Enter the facility name as specified in FAA Order JO 7350.9, Location Identifiers.

**2.** Location: Enter city and state.

**3.** Communications Equipment: Check as appropriate.

**4.** Facility Type: Check as appropriate.

**5.** Month: Enter the month using two digits (e.g., 01 – for month of January).

**6.** Year: Enter the year using the last two numerals of the calendar year (CY).

**7.** Location Identifiers: Enter the three-letter identifier specified in FAA Order JO 7350.9.

**8.** Aircraft Contacted: Enter the number of aircraft contacted in accordance with paragraph 17-2-1, Aircraft Contacted.

**9.** Flight Plans Originated: Enter the number of flight plans in accordance with paragraph 17-3-1, Flight Plan Count.

**10.** Pilots Briefs: Enter the number of pilot briefings in accordance with paragraph 17-4-1, Pilot Briefing Count.

**11.** NOTAMs issued: Enter the total number of NOTAMs issued. Do not count NOTAM cancellations.

**12.** Calls to Briefers: Enter the total number of calls. Do not use decimals. Indicate the number of call as follows:

**(a)** Litton facilities enter the number of “calls offered” from the Gate 1 Report.

**(b)** Denro facilities enter the number of calls received (“#RCVD”) from the Automatic Call Director (ACD) Call History -- Briefer Calls.

**13.** Calls Lost: All calls lost after zero (0) seconds delay must be counted.

**(a)** Litton facilities enter the “average speed answered” in whole seconds for calls to briefers from the Gate 1 Report.

**(b)** Denro facilities enter the average delay (“AVDLY”) History--Briefer Calls.

**14.** Airport Advisories: Enter the number of airport advisories in accordance with paragraph 17-2-2, Local Airport Advisory (LAA)/Remote Airport Advisory (RAA)/Remote Airport Information Service (RAIS).

**15.** Radio Contacts: Enter the number of radio contacts in accordance with paragraph 17-2-3, Radio Contacts.

**d.** Instructions for recording monthly activity for FCFSS facilities are contained in contractor requirement documents.

### 17-5-2. DISTRIBUTION AND AMENDMENT

**a.** Distribute FAA Form 7230-13 (FSS Activity) as follows:

**1.** Forward the original form to the Flight Service Safety and Operations Group not later than the 2nd workday (Monday–Friday) of the following month.

**2.** Retain a copy of the form in the facility’s files.

**b.** Correct any errors in the forms sent in prior months by completing a new form, circling the revised fields, and marking the form “AMENDED

COPY.” Amended copies of the forms more than one month old will not be accepted unless approval has been obtained from the Statistics and Forecast Branch, APO-110, by the Flight Service Safety and Operations Group. Send amended copies, along with the current reporting month’s forms, to the Flight Service Safety and Operations Group.

evaluation of TMI(s) in place with emphasis on adjusting the flow of traffic away from the SAA.

(2) The air traffic manager (ATM) must ensure the appropriate service review (i.e.; system service review or traffic management review) is completed in accordance with FAA Order JO 7210.634, Air Traffic Organization (ATO), Quality Control, Chapter 3.

10. A full description of all TM actions/initiatives (e.g., ground delay programs, miles-in-trail (MIT)) is entered in the TMU log, including, but not limited to, start and stop times, facilities/operations affected, and justification.

11. As a minimum, the unit is operated during the hours necessary to encompass peak traffic periods and the associated time to complete the logging and the reporting requirements.

**b. In ARTCC facilities TMUs must:**

1. In conjunction with terminal TMUs, develop arrival strategies and deliver arrival aircraft to achieve the Airport Arrival Rate (AAR).

2. Actively utilize the Traffic Situation Display (TSD) and the monitor and alert function of the TFMS to adjust traffic flows on a proactive basis.

3. Periodically analyze and review procedures to ensure effectiveness and adherence to programs/initiatives, and, when necessary, make adjustments. Cancel TM initiatives promptly when no longer needed.

4. The facility manager must make provisions to ensure a Weather Coordinator (WC) is assigned on each shift by designating a TM representative to serve as the WC. During midnight operations or when no TM personnel are available, the WC position may be combined at the OMIC position. The manager must additionally ensure that personnel assigned WC duties receive prior training in the associated duties and responsibilities of the position and establish procedures.

**REFERENCE—**

FAA Order JO 7210.3, Section 26, Weather Management.

5. Establish an analysis function referred to in Chapter 18, Section 4, as amended.

6. Address approved local TM messages on TFMS to:

(a) The ATCSCC and the adjacent facilities concerned.

(b) Other ARTCCs whose terminals are expected to generate a significant amount of traffic for the affected area during the effective time of the message.

(c) Appropriate flight service stations (FSS). ■

**c. In terminal facilities, TMUs must:**

1. Balance the arrival flow and the tower en route flow by coordinating with the appropriate ARTCC TMUs and/or adjoining terminal facility(s) to ensure that demand does not exceed current capabilities.

2. Through coordination with the tower and TRACON, establish AAR and assist the ARTCC and adjacent terminal facility(s) in the development of strategies to achieve the AAR.

3. Oversee departure fix balancing to ensure sector efficiency into the next facility's airspace.

4. Implement gate hold procedures as required to reduce airport surface congestion.

5. Coordinate with airport officials to ensure closures of runways, taxiways, and other airport facilities minimize operational impact.

6. Ensure optimum airspace/runway configurations.

7. Periodically analyze and review TM procedures to ensure effectiveness and adherence to programs/initiatives and, when necessary, make adjustments. Cancel TM initiatives promptly when no longer needed.

8. Notify the appropriate facilities concerning local TM initiatives.

**NOTE—**

*The appropriate ARTCC TMU must be the focal point for any interface concerning TM related issues, as well as the mediator between terminal facilities. The ARTCC TMU will then coordinate with the ATCSCC on behalf of the TRACON or the tower. Because of the unique situation of the New York TRACON having three centers, the New York TRACON must coordinate directly with the ATCSCC and have the ATCSCC confer the appropriate ARTCCs. In those instances where the ARTCC TMU is unable to resolve disputes between multiple terminal facilities, the ATCSCC must have the final decision making authority.*





## TBL 18-5-1

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	GYX	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	

**18-5-5. 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.

**b.** The TMO or overlying TMO, in conjunction with their ASPM facilities, must provide the following static data to their appropriate Deputy Director of System Operations (DDSO) and ensure the accuracy of the information:

**1.** For NTML airport information: All normal runway configurations and their associated AARs/ADRs by April 30, August 31, and December 31 of 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.** For OIS airport information: Monthly changes to the following ASPM airport data no later than the last day of the month:

**(a)** Normal runway configuration and associated AARs/ADRs.

**(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 arrival/configuration.

**c.** The DDSO 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.

### **18-5-6. EN ROUTE INTRAFACILITY 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 TBM operations and when implementing and evaluating TM initiatives.

### **18-5-7. TERMINAL INTERFACILITY 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. TBM operations or 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.

### **18-5-8. 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.

### **18-5-9. NTML FACILITY CONFIGURATION REQUIREMENTS**

At least one TMU position in each facility must:

a. Subscribe to DCC for information affecting your facility.

b. Subscribe to underlying facilities for the following information:

1. Runway configurations.
2. Delays.
3. Deicing.

## Section 7. Traffic Management Initiatives

### 18-7-1. GENERAL

Traffic Management Initiatives (TMIs) are techniques used to manage demand with capacity in the NAS.

- a. Properly coordinated and implemented TMIs are an important tool in the air traffic system. These initiatives contribute to the safe and orderly movement of air traffic.
- b. Any TMI creates an impact on customers. It is imperative to consider this impact and implement only those initiatives necessary to maintain system integrity.

### 18-7-2. BACKGROUND

TM personnel utilize a variety of tools and NAS performance information to implement TMIs that are carried out by air traffic controllers and flight operators to ensure a safe and efficient operation.

#### NOTE—

*TMIs do not include controller coordinated actions. See FAA Order JO 7110.65, subparagraph 5-4-5e. Comply with restrictions issued by the receiving controller unless otherwise coordinated.*

### 18-7-3. POLICY

To maintain the integrity of the air traffic system, facility TM personnel must employ the least restrictive methods available to minimize delays.

### 18-7-4. TYPES OF TMIs

- a. Altitude: used to separate different flows of traffic or flights flying in close proximity to each other.

1. Tunneling— Term to indicate aircraft will be descended prior to the normal descent point to avoid airspace or traffic constraints.

2. Capping— Term to indicate aircraft will be cleared to an altitude lower than their requested altitude until they are clear of a particular airspace. Capping may apply to the initial segment of the flight or for the entire flight.

3. Low Altitude Arrival/Departure Routing (LAADR). A set of routings with altitude expectations for usage in times of capacity constraints in the NAS. LAADR may apply to the departure or the arrival phase of flight. LAADR requires a written agreement with the customers prior to implementing.

b. Miles-in-trail (MIT). The number of miles required between aircraft that meet specific criteria. The criteria may be airport, fix, altitude, sector, or route specific. MIT are used to apportion traffic into manageable flows, as well as, provide space for additional traffic (merging or departing) to enter the flow of traffic.

c. Minutes-in-trail (MINIT). The number of minutes required between successive aircraft. It is normally used in a non-radar environment, or when transitioning to a non-radar environment, or additional spacing is required due to aircraft deviating around weather.

d. Fix balancing. Assigning an aircraft a fix other than in the filed flight plan in the arrival or departure phase of flight to equitably distribute demand.

e. Airborne holding. Planned holding of aircraft may be utilized. This is normally done when the operating environment supports holding and the weather conditions are expected to improve shortly; this ensures aircraft are available to fill the capacity at the airport.

f. Departure Sequencing Program (DSP)— Assigns a departure time to achieve a constant flow of traffic over a common point. Normally, this involves departures from multiple airports.

g. TFMS Programs.

1. Ground delay programs. (See Chapter 18, Section 10, Ground Delay Programs.)

2. Airspace flow programs. (See Chapter 18, Section 11, Airspace Flow Programs (AFP).)

3. Collaborative trajectory options program (CTOP). (See Chapter 18, Section 12, Collaborative Trajectory Options Program (CTOP).)

h. Reroutes:

1. Reroutes are ATC routings other than the filed flight plan. They are issued to:

(a) Ensure aircraft operate with the “flow” of traffic.

(b) Remain clear of special use airspace.

(c) Avoid congested airspace.

(d) Avoid areas of known weather or where aircraft are deviating or refusing to fly.

2. Operators should amend flight plans when they are more than 45 minutes from departure.

3. Sources for route information:

(a) Chart Supplement U.S.

(b) Preferential Route Information in facilities.

(c) Route Management Tool.

(d) North American Route Notice.

(e) Federal Air Regulations.

(f) Notices to Air Missions.

(g) Advisories issued by ATCSCC. (These are listed on the Operational Information System.)

4. Pre-departure reroute (PDRR) is a capability within TFMS that enables ATC to quickly amend and execute revised departure clearances to mitigate en route constraints or balance en route traffic flows. This capability is especially beneficial during periods of severe weather when departure routes are rapidly opening and closing.

5. Airborne reroute (ABRR) is a capability within TFMS that is used for tactical reroutes for airborne aircraft. The ARTCC TMC uses TFMS route amendment dialog (RAD) to define a set of aircraft-specific reroutes that address a certain traffic flow problem and then electronically transmits them to ERAM for execution by the appropriate sector controllers.

6. Trajectory options set (TOS) – A message sent by participating flight operators to TFMS defining a prioritized group of options. These preferences are defined through a combination of routes and/or altitudes and/or speeds with each trajectory being weighted through the use of flight operator submitted preferences. (See Chapter 18, Section 12, Collaborative Trajectory Options Program (CTOP), and Pilot/Controller Glossary.)

7. More information on routes is contained in Chapter 18, Section 19, Coded Departure Routes, Section 20, Route Advisories, and Section 22, National Playbook.

i. Ground Stops. (See Chapter 18, Section 13, Ground Stop(s).)

#### 18-7-5. EXCEPTION

The above list is not all-inclusive and does not preclude the innovation and application of other procedures or traffic flow management strategies that will result in improved customer service.

#### 18-7-6. TMI DATA

The efficiency of the NAS is enhanced when all participants have access to the same data. Utilization of shared technology, e.g., Flow Constrained Area (FCA)/Flow Evaluation Area (FEA) enhances the coordination process.

#### 18-7-7. TMI APPROVAL AUTHORITY

a. The ATCSCC is the approval authority for all en route and designated terminals interfacility TMIs, except as identified in subparagraph (b) below and MIT restrictions of ten (10) miles or less. TMIs that are expected to result in reportable delays must be coordinated through the ATCSCC. Reportable delays are delays of 15-minutes or more as defined in FAA Order JO 7210.55, Operational Data Reporting Requirements.

##### NOTE–

*New York TRACON is a designated terminal and others may be included at the direction of System Operations.*

b. The Center/TRACON is responsible for TMI within their area of jurisdiction (underlying terminals) that do not cause reportable delays.

#### 18-7-8. PROCESSING TMI

a. The initiating facility must identify the need for a TMI, explore alternatives, and prepare a justification.

b. The initiating facility must be prepared to discuss the proposal at the request of the ATCSCC and/or the receiving facility prior to implementation during the joint review process.

c. Facilities must continuously monitor and evaluate the TMI, and make adjustments as necessary, including cancellation.

## Part 6. REGULATORY INFORMATION

### Chapter 19. Waivers, Authorizations, and Exemptions

#### Section 1. Waivers and Authorizations

##### 19-1-1. PURPOSE

This section prescribes policy and guidelines for the grant or denial of a Certificate of Waiver or Authorization from Title 14, Code of Federal Regulations (14 CFR).

##### 19-1-2. POLICY

a. The FAA delegates to the Service Area Director of Air Traffic Operations and Flight Standards Division Managers, the Administrator's authority to grant or deny a Certificate of Waiver or Authorization (FAA Form 7711-1), and permits the re-delegation of this authority. Further, re-delegation of this authority to grant or deny waivers or authorizations must be consistent with the functional areas of responsibility as described in the FAA's Exemption/Rulemaking Process documents, and may be limited if deemed appropriate.

b. Applications for a Certificate of Waiver or Authorization acted upon by a Service Center Operations Support Group (OSG) will normally be processed in accordance with guidelines and standards contained herein, unless found to be in the best interest of the agency to deviate from them.

c. Applications for waiver or authorization that require both Air Traffic Organization and Flight Standards technical considerations must be handled jointly.

d. The grant of a Certificate of Waiver or Authorization constitutes relief from the specific regulations stated, to the degree and for the period of time specified in the certificate, and does not waive any state law or local ordinance. Should the proposed operations conflict with any state law or local ordinance, or require permission of local authorities or property owners, it is the applicant's responsibility to resolve the matter.

##### 19-1-3. RESPONSIBILITIES

a. Air traffic, as designated by the Service Area Director, is responsible for the grant or denial of Certificate of Waiver or Authorization, except for those sections assigned to Flight Standards (detailed in subparagraph b).

b. Flight Standards, as designated by the Administrator, and described in FAA Order 8900.1, Flight Standards Information Management System (FSIMS), is responsible for providing advice with respect to the qualification of civil pilots, airworthiness of civil aircraft, and the safety of persons and property on the ground. Additionally, Flight Standards has the responsibility for the grant or denial of Certificate of Waiver or Authorization from the following sections of 14 CFR:

1. Section 91.119, Minimum safe altitudes: General;
2. Section 91.135, Operations in Class A Airspace;
3. Section 91.175, Takeoff and landing under IFR;
4. Section 91.209, Aircraft lights;
5. Section 91.303, Aerobatic flight;
6. Any section listed in 91.905 as appropriate for aerobatic demonstrations and other aviation events;
7. Section 105.21, Parachute operations over or into congested areas or open air assembly of persons, as appropriate for aerobatic demonstrations and other aviation events.

c. Certificate Holder, compliance with the provisions of a waiver is the responsibility of the holder who must be thoroughly informed regarding the waiver and those actions required of them by any special provisions. The holder must be advised that it is their responsibility to ensure that all persons participating in the operation are briefed on the waiver.

#### **19-1-4. PROCESSING CERTIFICATE OF WAIVER OR AUTHORIZATION (FAA FORM 7711-2) REQUESTS**

a. Requests for a Certificate of Waiver or Authorization (FAA Form 7711-2) may be accepted by any FAA facility and forwarded, if necessary, to the appropriate office having waiver authority. Those offices making the determination of whether an application should be processed by higher authority may forward the request to the appropriate Service Area Director for action. Those requests that are forwarded to FAA Washington Headquarters for processing must include all pertinent facts, background information, recommendation(s), as well as the basis and reasons for requesting Headquarters action.

b. Requests must be coordinated with all concerned FAA elements, prior to approval, by the office that is most convenient to the applicant and having waiver authority, even though the proposed operation will be conducted within or extended into other jurisdictional areas. This procedure is intended to establish one office as the agency contact for an applicant and will preclude the need for the petitioner to deal with the FAA at various locations.

#### **19-1-5. PROCESSING CERTIFICATE OF WAIVER OR AUTHORIZATION RENEWAL OR AMENDMENT REQUESTS**

a. A renewal request should be made by means of a new application. However, a request by another method is acceptable if its substance is essentially the same as the previous application or when, in the judgment of the waiver or authorization office, the request is sufficiently similar that new considerations are not required.

b. An existing waiver or authorization may be amended either by re-issuance or by letter.

#### **19-1-6. ISSUANCE OF CERTIFICATE OF WAIVER OR AUTHORIZATION (FAA FORM 7711-1)**

Waivers and authorizations must be completed in accordance with the following instructions and must be signed only by the appropriate authority (see FIG 19-1-1 and Example). The FAA Form 7711-1 should be:

a. Issued to an organization, whenever possible, in preference to an individual but indicate name and title of the individual acting for the organization.

b. Specify the operations that are permitted by the waiver or authorization.

c. Define the area and specify altitudes at which they may be conducted.

d. Specify the regulation, or portion thereof waived by numerical and letter reference as well as title. This section is left blank for authorizations (e.g., unmanned air vehicle operations, etc.).

e. Specify the effective and expiration dates, including hours of operation. The specific dates and hours of operation must allow sufficient time for the accomplishment of the operation and, if appropriate, an alternate date to cover cancellations that might be necessary due to adverse weather conditions.

1. ATO issued waivers or authorizations may be made effective for a period of up to 24 calendar months in accordance with Flight Standards and ATO policies.

2. Flight Standards may issue waivers for aerobatic practice areas (APAs) for a period of up to 36 calendar months.

f. Restrict the waiver or authorization to the extent required by the operation. Further, any special provisions that are required to provide for an adequate level of flight safety and the protection of persons and property on the surface; for example: limitations, location, time periods, and type aircraft, must be specified and included as part of the waiver or authorization.

#### **NOTE-**

*If a longer duration is requested, or the operation is of national importance, advise the proponent to petition for an exemption utilizing 14 CFR Section 11.63, How and to whom do I submit my petition for rulemaking or petition for exemption.*

#### **19-1-7. RETENTION OF CERTIFICATES OF WAIVER OR AUTHORIZATION**

The issuing office must retain one copy of each waiver, authorization or denial, along with supporting data, for at least one year after the date of denial or expiration, as appropriate. Significant or unusual waivers or authorizations may be retained for longer periods.

## EXAMPLE OF SPECIAL PROVISIONS

These special provisions are for suggested use only. You will need to modify them or develop new ones depending on the proponent and the operating conditions.

1. Contact the [name of FAA facility] at [telephone number], not less than 24 hours or more than 48 hours prior to conducting any [name of event], for the purpose of issuing a Notice to Air Missions. ■
2. Contact the [name] Air Route Traffic Control Center at [telephone number], prior to and immediately after [name of event], for the purpose of providing real time notice of operations.
3. All persons connected with this [name of event] must be familiar with this waiver and its special provisions, as well as part 101, [specific section of 14 CFR].
4. [Any other special provision(s) as required].





## Section 6. 14 CFR Part 107, sUAS Operations

### 19-6-1. GENERAL

a. No person may operate a small unmanned aircraft in Class B, Class C, or Class D airspace, or within the lateral boundaries of the surface area of Class E airspace designated for an airport unless that person has prior authorization from Air Traffic Control (ATC). Proponents requesting to operate under 14 CFR Part 107.41 within these classes of airspace must request an authorization through either the Low Altitude Authorization and Notification Capability (LAANC) or DroneZone.

1. LAANC Operations: <https://faa.gov/go/laanc>.

2. DroneZone: <https://faadronezone.faa.gov/>.

b. Letters of Agreement (LOA) may be used in conjunction with Part 107 airspace authorizations/waivers when the Air Traffic Manager (ATM) deems it necessary; they cannot be used in lieu of airspace authorization/waivers.

c. In the event a Part 107 operator contacts an ATC facility directly for authorization, the facility must not issue the authorization. The facility must direct the operator to the LAANC or DroneZone site.

d. 14 CFR Part 107.41 waiver applications can only be submitted through DroneZone.

e. For all operations occurring on-airport, follow procedures in FAA Order JO 7200.23, Processing of Unmanned Aircraft Systems Requests, Chapter 3, Processing of 14 CFR Part 107.41 Airspace Authorization Request.

### 19-6-2. LOW ALTITUDE AUTHORIZATION AND NOTIFICATION CAPABILITY (LAANC)

a. Automates Part 107 sUAS operator requests for access to airspace and to receive authorizations from UAS Service Suppliers.

#### REFERENCE-

FAA Order JO 7210.3, Chapter 12, Section 10, UAS Facility Maps (UASFM).

b. ATC authorization granted through LAANC may not satisfy all of the requirements for UAS operations. Proponents requesting to operate in airspace requiring authorization under 14 CFR

107.41, must also meet the requirements set by any governing Notice to Air Missions (NOTAM) or Temporary Flight Restrictions (TFR).

### 19-6-3. MANUAL AIRSPACE AUTHORIZATION PROCEDURES (VIA DRONEZONE)

a. Headquarters/Service Centers will use the facility approved UASFM to evaluate Part 107 requests.

1. No facility coordination is required, if the requests can be authorized using the UASFM.

2. If the processor is unable to authorize the request using the UASFM, they must coordinate with the facility.

b. If there is a facility approved UASFM for Class E airspace areas designated as a surface area for an airport, requests will be processed in accordance with the UASFM. If there is no facility approved UASFM, the Class E surface area designated for airport requests will be processed at Headquarters/Service Centers using the following criteria. Any requests outside of these parameters must be coordinated directly with the controlling facility prior to approval:

1. Operations conducted from 0 to 2 nautical miles (NM) from the Airport Reference Point (ARP) will not be authorized by Headquarters/Service Center without prior coordination with the facility.

2. Operations conducted from beyond 2 NM and up to 3 NM from the ARP will be authorized to operate at or below 100 feet above ground level (AGL).

3. Operations conducted from beyond 3 NM and up to 4 NM from the ARP will be authorized to operate at or below 200 feet AGL.

4. Operations conducted from beyond 4 nautical miles from the ARP will be authorized to operate at or below 400 feet AGL.

5. A weather minimum of a 1000-foot ceiling.

6. All authorization for Class C and D surface areas that revert to Class E surface area designated for an airport will be evaluated utilizing UASFM for the Class "C and D" surface area.

**NOTE–**

**1.** Headquarters/Service Centers are responsible for issuing waivers to the proponent. In instances where the authorization requires a waiver to 14 CFR Part 107.31 (Visual line of sight), 14 CFR Part 107.35 (Operations of multiple sUAS), 14 CFR Part 107.41 (Operation in certain airspace), 14 CFR Part 107.37 (Operation near aircraft; right of way rules), or 14 CFR Part 107.51(b) (Operating limitations for sUAS – altitude), pending waivers must be included with the authorization request and coordination will take place with the facility.

**2.** The responsible person for the operation and their contact information will be listed in the authorization or waiver.

**3.** With regards to Class E airspace, only airspace within the lateral boundaries of the surface area designated for an airport (Class E2) requires a Part 107 authorization or waiver.

**c.** An automated message will be forwarded to the facility and the proponent of the approval, which will contain:

- 1.** Waivers if applicable.
- 2.** Description of the operational area.
- 3.** Contact information for communication/recall.
- 4.** Times of operation.

**d.** If 14 CFR Part 107 operations cannot be authorized using the UASFM, ATC facilities will be contacted by Headquarters/Service Centers for coordination.

**e.** If after coordinating with the ATC facility, the operation cannot be authorized, an automated message will be forwarded notifying the facility and the proponent of the denial.

**f.** Special Governmental Interest (SGI), Part 107 authorizations/waivers will be managed by System Operations Security, AJR–2.

#### **19–6–4. HEADQUARTERS/SERVICE CENTER AIRSPACE WAIVER PROCESS**

**a.** Applications for waivers are submitted to the Headquarters/Service Center through DroneZone.

**b.** Under Headquarters/Service Center waiver process, ATO approval is required for the following

waivers and will coordinate with Flight Standards Service (AFS), if needed:

- 1.** Yielding the right of way (§ 107.37a).
- 2.** Operations in Certain Airspace (§ 107.41).
- 3.** Maximum altitude (§ 107.51b).

**c.** Under Headquarters/Service Center waiver process, AFS may approve waivers requested for the following items and will coordinate with ATO, if needed:

- 1.** Operations from a moving vehicle or aircraft (§ 107.25).
- 2.** Daylight operation (§ 107.29).
- 3.** Visual line of sight (§ 107.31).
- 4.** Visual observer (§ 107.33).
- 5.** Operations of multiple UASs (§ 107.35).
- 6.** Operation over people (§ 107.39).
- 7.** Maximum ground speed (§ 107.51a).
- 8.** Minimum flight visibility (§ 107.51c).
- 9.** Cloud minimum (§ 107.51d).

**d.** Headquarters/Service Center will evaluate the waiver(s) for justification, including supporting data and documentation, as necessary, which establishes the proposed operation can be safely conducted under the terms of a certificate of waiver. Headquarters/Service Center will coordinate all waivers to 14 CFR Part 107.29, 14 CFR Part 107.31, 14 CFR Part 107.35, 14 CFR Part 107.37, 14 CFR Part 107.41, and 14 CFR Part 107.51(b) (except those covered below in subparagraph e), with the affected facility to evaluate if the proposed operation can be safely conducted based on the proposed mitigation(s) and, if needed, apply any additional mitigations/limitations.

**e.** Waivers in Class E surface areas and Class G airspace (excluding those waivers that take the aircraft into all other classes of airspace that are not in compliance with UASFMs) will be approved by Headquarters/Service Center. This approval authority does not preclude the facility from being coordinated with if Headquarters believes additional input from the facility is beneficial to the safety of the operation.

# Chapter 20. Temporary Flight Restrictions

## Section 1. General Information

### 20-1-1. PURPOSE

This section prescribes guidelines and procedures regarding the use and issuance of regulatory temporary flight restrictions (TFR).

### 20-1-2. AUTHORITY

a. The FAA Administrator has sole and exclusive authority over the navigable airspace of the United States. The Administrator has broad authority under Section 40103 of Title 49 of the United States Code (U.S.C.) to regulate, control, and develop plans for the use of the navigable airspace and to formulate policy for navigable airspace. See also 49 U.S.C. Section 40101(d).

b. Title 14 of the Code of Federal Regulations (14 CFR) part 91 contains regulations addressing temporary flight restrictions.

### 20-1-3. REASONS FOR ISSUING A TFR

While not all inclusive, a TFR may be issued for the following reasons: toxic gas leaks or spills, fumes from flammable agents which, if fanned by rotor or propeller wash, could endanger persons or property on the surface or in other aircraft; volcanic eruptions that could endanger airborne aircraft and occupants; hijacking incidents that may endanger persons or property on the surface, or airborne aircraft and occupants; aircraft accident/incident sites; aviation or ground resources engaged in wildfire suppression; aircraft relief activities following a disaster; aerial demonstrations or major sporting events.

### 20-1-4. TYPES OF TFRs

TFRs may be issued under the following regulations:

a. Section 91.137, Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas.

b. Section 91.138, Temporary Flight Restrictions in National Disaster Areas in the State of Hawaii.

c. Section 91.139, Emergency Air Traffic Rules.

d. Section 91.141, Flight Restrictions in the Proximity of the Presidential and Other Parties.

e. Section 91.143, Flight Limitation in the Proximity of Space Flight Operations.

f. Section 91.145, Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events.

#### NOTE-

See Chapter 21, Section 6, for information regarding Special Security Instructions issued under 14 CFR 99.7 Special Security Instructions.

### 20-1-5. TFR NOTAM CONTENT

TFR NOTAMs must comply with procedures detailed in FAA Order 7930.2, Notices to Air Missions (NOTAM).

### 20-1-6. TFR INFORMATION

a. Educational information regarding TFRs can be found in 14 CFR part 91, the Aeronautical Information Manual, and Advisory Circular 91-63, Temporary Flight Restrictions (TFRs) and Flight Limitations.

b. National Airspace System (NAS) users or other interested parties should review the latest available TFR information at any of the following sources:

1. TFR List: <http://tfr.faa.gov/tfr2/list.html>

2. TFR Graphical:  
[http://tfr.faa.gov/tfr\\_map\\_ims/html/index.html](http://tfr.faa.gov/tfr_map_ims/html/index.html)

3. Domestic Notices: [https://www.faa.gov/air\\_traffic/publications/domesticnotices/](https://www.faa.gov/air_traffic/publications/domesticnotices/)

4. International Notices: [https://www.faa.gov/air\\_traffic/publications/internationalnotices/](https://www.faa.gov/air_traffic/publications/internationalnotices/)

5. FAA NOTAM Search:  
<https://notams.aim.faa.gov/notamSearch/>

6. FCFSS website:  
<https://www.1800wxbrief.com/>

### 20-1-7. TFRs OUTSIDE OF THE UNITED STATES AND ITS TERRITORIES

TFRs are only implemented for sovereign U.S. airspace and its territories. If restrictions are located

in an area that extends beyond the 12-mile coastal limit or a U.S border, the NOTAM will contain language limiting the restriction to the airspace of the U.S., and its territories and possessions. The FAA may issue an advisory via the NOTAM System to inform affected users of any hazard or dangerous information outside of the sovereign U.S. airspace and its territories.

#### **20-1-8. TFR QUESTIONS**

Direct any questions or concerns regarding TFRs to the ATO service area director having jurisdiction over the TFR area. You may also contact Mission Support, Rules and Regulations Group, FAA Headquarters, Washington, D.C., at (202) 267-8783.

## Section 2. Responsibilities

### 21-2-1. DESCRIPTION

This section identifies the primary Air Traffic Management (ATM) security responsibilities of System Operations Security, as well as air traffic facilities, pertinent to the implementation of ATM security measures. System Operations Security is responsible for collaboration and coordination with air traffic facilities on the planning and operational execution of ATM security measures and related efforts to protect the nation while mitigating safety and efficiency impacts on the National Airspace System (NAS).

### 21-2-2. TACTICAL OPERATIONS SECURITY GROUP RESPONSIBILITIES

Tactical Operations Security Group responsibilities are undertaken primarily through four Air Traffic Security Coordinator (ATSC) teams and the System Operations Support Center (SOSC) team. Tactical Operations Security Group, as appropriate and in collaboration with air traffic facilities, must:

**a.** Cooperate with the North American Aerospace Defense Command (NORAD), the Transportation Security Administration (TSA), Customs and Border Protection (CBP), and other interagency security partners to monitor the NAS and other relevant airspace to detect and tactically respond to potential threats, including suspicious flights.

**b.** Cooperate with the United States Secret Service (USSS), Federal Bureau of Investigation (FBI), and other interagency partners to operationally implement ATM security measures used to protect security-sensitive locations (e.g., the DC Special Flight Rules Area and Flight Restricted Zone [DC SFRA and FRZ]); events (e.g., National Special Security Events [NSSE]); and activities, including Very Important Persons (VIP) travel.

**c.** Conduct operational efforts to mitigate the impact of threats and security measures on the safety and efficiency of the NAS.

**d.** Develop and coordinate the publication of flight advisories, Security Notices (SECNOT), and Notices to Air Missions (NOTAM) enabling ATM security and/or other emergency operations efforts. This function includes the publication of Temporary

Flight Restrictions (TFR) pursuant to Title 14 Code of Federal Regulations (CFR) Parts 99.7, Special security instructions; 91.141, Flight restrictions in the proximity of Presidential and other parties; and 91.137, Temporary flight restrictions in the vicinity of disaster/hazard areas.

**e.** Serve as the final approving authority for all real-time ATM security determinations regarding aviation operations within the NAS.

**f.** Coordinate and authorize routings for U.S. Department of State (DOS) designated Special Interest Flights (SIF).

**g.** Lead execution of ATM aspects of classified and other sensitive security-related air missions.

**h.** Manage the Special Governmental Interest (SGI) Program for Unmanned Aircraft System (UAS) waivers and authorizations, including emergency addendums to UAS Certificates of Authorization or Waiver (ECOA).

**i.** Staff ATSC and SOSC positions.

### 21-2-3. SPECIAL OPERATIONS SECURITY GROUP RESPONSIBILITIES

Special Operations Security Group responsibilities are undertaken primarily through senior FAA representatives, who represent the agency in coordinating ATM security issues with national defense, homeland security, and law enforcement interagency partners. Special Operations Security Group, as appropriate and in collaboration with air traffic facilities must:

**a.** Cooperate with the USSS, FBI, and other interagency partners to develop and coordinate ATM security measures used to protect security-sensitive locations (e.g., the DC SFRA and FRZ); events (e.g., NSSEs); and activities, including VIP travel (e.g., Presidential travel).

**b.** Develop and coordinate plans and procedures to mitigate the impact of threats and security measures on the safety and efficiency of the NAS, including coordination with NORAD and other interagency partners to facilitate fighter intercept operations.

**c.** Develop plans for and coordinate the execution of ATM elements of select national defense,

homeland security, and law enforcement exercises. This work includes support of classified and other sensitive security-related exercises.

**d.** Plan and coordinate ATM related support to classified and other sensitive aviation operations, including UAS flights, and mitigate impact of that activity on the NAS.

**e.** Coordinate and authorize call signs for special aircraft missions operated by law enforcement agencies (federal, state, and local), national defense entities, and for other special activities.

**f.** Staff senior FAA representative and liaison officer positions at FAA Headquarters and embedded at key national defense, homeland security, and law enforcement locations.

#### **21-2-4. STRATEGIC OPERATIONS SECURITY GROUP RESPONSIBILITIES**

Strategic Operations Security Group responsibilities are undertaken primarily through a staff at FAA Headquarters. Strategic Operations Security Group, as appropriate and in collaboration with air traffic facilities, must:

**a.** Cooperate with the Defense Threat Reduction Agency (DTRA) and other interagency partners to plan and coordinate the conduct of Open Skies Treaty missions in the NAS.

**b.** Cooperate with the Federal Emergency Management Agency (FEMA), State Emergency Management Agencies (SEMA), U.S. Northern Command (USNORTHCOM), State National Guard (NG) commands, and other federal, state, and local partners to develop and implement air traffic management aspects of disaster response and other emergency operations plans.

**c.** Manage the development and sustainment of ATM security related FAA ATO procedures, including: FAA Order JO 7610.4, Special Operations; FAA Order JO 7110.67, Air Traffic Management Security Services for Special Operations; FAA Order JO 7110.65, Air Traffic Control; and FAA Order JO 7210.3, Facility Operation and Administration.

**d.** Coordinate with U.S. Strategic Command (STRATCOM), FAA Spectrum Engineering, and other key stakeholders to support Global Positioning System (GPS) interference and Electronic Attack (EA) testing, and Identification Friend or Foe (IFF) exercises within the NAS. Plan and, as needed, coordinate actions to mitigate impact of this specialized activity on the safety and efficiency of the NAS.

**e.** Lead the planning and coordination of ATM security related procedures for foreign aircraft overflight, including DOS SIF activity and Part 99.7 NOTAMs that describe instructions for entry/exit, transit, and flight operations within U.S. controlled airspace.

**f.** Lead ATO engagement on ATM security matters with foreign counterparts, including the International Civil Aviation Organization (ICAO) and foreign Air Navigation Service Providers (ANSP).

**g.** Track, collect, and analyze aviation security data related to ATM security events in the NAS, such as unauthorized laser illuminations, unauthorized UAS, TFR violators, Tracks of Interest (TOI), No Radio (NORDO).

**h.** Provide the means for identification and protection of all real-time flight data information associated with sensitive flights in the NAS.

**i.** Develop and implement call sign procedures for the NAS.

**j.** Coordinate requests from governmental agencies, including law enforcement, for use of ICAO 3-letter designators/telephonies; and coordinate all requests for use of U.S. special call sign designators/telephonies.

**k.** Serve as ATO lead for the National Hurricane Operations Plan (NHOP).

**l.** Develop and coordinate ATM security related procedures for specialized NAS threats, including lasers, Man Portable Air Defense Systems (MANPADS), UAS, and diseases of global public health concern.

**m.** Develop ATM security procedures related to NEXTGEN systems, the use of emerging technologies, and new entrants in the NAS, such as UAS and commercial space activities.

## Section 4. Supplemental Duties

### 21-4-1. 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 (844) 432-2962 (toll free).

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.

### 21-4-2. 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 the above 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 (844) 432-2962 (toll free).

### 21-4-3. 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 must 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.

#### **21-4-4. 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.

#### **21-4-5. 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.

#### **21-4-6. INTELLIGENCE ANALYSIS AND COMMUNICATION**

**a.** Tactical Operations Security must 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.

#### **21-4-7. UAS SPECIAL GOVERNMENTAL INTEREST (SGI) OPERATIONS**

**a.** Public UAS and, in select cases, civil UAS operations may be needed to support activities which answer significant and urgent governmental interests, including national defense, homeland security, law enforcement, and emergency operations objectives. These operations are authorized through UAS SGI Addendums.

**b.** Requests for UAS SGI operations are processed as either a COA addendum, modification, or a Part 107 authorization and granted through the SGI process managed by System Operations Security, and applied under the authority of their System Operations Support Center (SOSC).



## Appendix 6. Commercial Space LOA Sample Templates

[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations, [Operator]

Letter of Agreement

Effective:

Subject: Coordination of [Operator] Launch/Reentry Operations from [name and location of Launch and (if applicable) Reentry site]

### 1. Purpose:

State the purpose of the Letters of Agreement (LOA), type of operation (launch, launch with reentry), and location of operation (name and location of launch and (if applicable) Reentry site). If LOA is for a one-time operation, state that.

#### *Sample text:*

This Letters of Agreement (LOA) provides procedures for the integration and appropriate coordination of [licensed/permitted] [Vehicle Type: horizontal/vertical] [launch/launch with reentry/hover-test] operations into the National Airspace System (NAS) from [name and location of launch and (if applicable) Reentry site].

### 2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

#### *Sample text:*

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the [license/permit] or when modifications are made to the [license/permit].

### 3. Scope:

List the pertinent ATC facilities, Operator, and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities as applicable. State distribution of the LOA. The distribution should include, at a minimum, all signatories and the Office of Commercial Space Transportation (AST).

#### *Sample Text:*

This LOA is pertinent to [ATC facilities], [additional stakeholders], and [Operator]. It is to be distributed to all signatories and stakeholders].

### 4. Responsibilities:

State the responsibilities of the Operator, lead ATC facility, and as needed, any other stakeholders and/or affected facilities.

- a. Operator must fulfill requirements provided in the Sample Text for this section.
- b. Lead ATC facility must fulfill requirements provided in the Sample Text for this section and
  1. Fill out the Points of Contact Table (Attachment B).
  2. Fill out the Actions Timetable (Attachment C)
- c. (As needed) Other stakeholders and affected facilities must:
  1. Ensure appropriate personnel are aware of the provisions of this agreement.

#### *Sample text:*

- a. [Operator] must:

1. Ensure all Operator [and their designees] personnel operating within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement.
2. Establish, make available, and be prepared to execute approved contingency plan(s).

a) Unless an established contingency plan has been approved by all necessary parties, [Operator] must coordinate requirements and get approval from [lead ATC facility] for contingency plan(s) at least [XX] calendar days prior to each operation.

3. Follow the procedures in Section 5 and the Action Timetable (Attachment C) with regards to communications and notifications.

4. Notify the parties in the Points of Contact Table (Attachment B) immediately if scheduled operations are cancelled.

5. (*As needed*) Develop separate agreements with foreign Air Navigation Service Providers when airspace coordination outside of the U.S. Flight Information Region is needed for the operation.

b. [Lead ATC facility] must:

1. Ensure all personnel responsible for providing air traffic service within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement. This includes notification to other affected facilities.

2. Ensure appropriate [lead ATC facility] personnel are aware of and prepared to execute approved contingency plan(s).

3. Communicate with necessary facilities and ascertain their readiness to execute approved contingency plan(s).

4. Except when real time notifications of actual start of activity and end of activity times are provided to the facility via ATO Space Operations coordination, take appropriate actions to restrict airspace use during the effective times of the aircraft hazard area(s).

5. Take additional measures for public safety deemed necessary by 14 CFR Parts 400–460.

c. (*As needed*) [Other stakeholders and affected facilities] must:

1. Ensure appropriate personnel are aware of the provisions of this agreement.

2. Ensure appropriate personnel are aware of and prepared to execute approved contingency plan(s).

d. Deviations from responsibilities and/or procedures established in this LOA must be coordinated prior to each operation, and responsibilities must be clearly defined in each case.

## **5. Procedures:**

Specify timeline and details for activities to take place prior to, during, and upon completion of operation.

Specify frequency of proposed operations and any limitations when considering dates and times of operations. Include any restrictions on days of week and/or times of day operations that may or may not occur. Restrictions may include times when military operations require use of certain airspace.

Specify procedure(s) for handling anomalies and emergencies. Information conveyed should include the location of event (latitude and longitude, represented as degree–minute–second), vehicle state, projected time the hazard will no longer be present, and any other pertinent details.

*Sample text:*

a. [Operator] must:

1. Provide a Launch/Reentry Forecast Package to the parties specified in the Points of Contact Table (Attachment B), except CARF, at least once every [XX] months. These forecasts will include a best estimate of all anticipated launches for the upcoming [XX] months.

2. Provide [lead ATC facility] a pre–planning package a minimum of [XX] calendar days prior to the planned operation. At a minimum, the package should include:

a) The launch/reentry window.

b) The best estimate of the geographic definition of the hazard area(s) (latitude and longitude, represented as degree–minute–second) for the primary date and any back–up date(s).

c) (*As needed*) Any support aircraft's type and call sign.

3. (*As needed*) Submit Altitude Reservation (ALTRV) request(s) to CARF (and email a copy of the request to the [lead ATC facility]) a minimum of [XX] days prior to the planned operation.

4. Verify the issuance of the appropriate NOTAMs.
5. No less than [XX] minutes in advance of a planned operation, notification will be given by [Operator] to [lead ATC facility] of intent for the [launch/hover-test] to take place.
6. During the operation, a [Operator] representative must participate on an FAA Hotline teleconference with [lead ATC facility] and ATO Space Operations (see Actions Timetable, Attachment C, for phone number). Communication on the FAA Hotline teleconference must be established no less than [XX] minutes prior to planned operation.
  - a) The [Operator] representative must be able to provide real-time verbal indications of the status of the operation, its progress along the launch/reentry trajectory, and occurrence of significant events.
  - b) Participation by representative(s) from [other stakeholders and affected facilities] is advised.
7. Notify [lead ATC facility] upon completion of the operation.
8. (*As needed*) Contact CARF and request that the appropriate ALTRVs be cancelled.
9. In the event of an anomaly, a [Operator] representative must immediately notify [lead ATC facility], via FAA Hotline teleconference, of the occurrence of the anomaly. Information communicated should include, at a minimum:
  - a) The last known state of the vehicle.
  - b) The location of the off-nominal event (latitude and longitude, represented as degree-minute-second).
  - c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) (when known).
  - d) Projected time the hazard(s) will no longer be present (when known).
  - e) Other information that will provide estimated positions of hazards.
10. In the event of an emergency, [Operator] must immediately contact [lead ATC facility], via FAA Hotline teleconference and email all the parties listed in the Points of Contact Table (Attachment B). Information conveyed should include, at a minimum:
  - a) The last known state of the vehicle.
  - b) The location of the event (latitude and longitude, represented as degree-minute-second).
  - c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) (when known).
  - d) Projected time the hazard(s) will no longer be present (when known).
  - e) Other information that will provide estimated positions of hazards.

b. [Lead ATC facility]:

1. Upon notification of a completed operation, [lead ATC facility] must cancel appropriate airspace restrictions and/or NOTAMs.
2. In the event when [lead ATC facility] becomes aware of a condition that would make the launch/reentry unsafe, [lead ATC facility] must immediately contact, via FAA Hotline, [Operator] and all other parties listed in the Points of Contact Table (Attachment B).

## 6. Attachments

- A. Signatures
- B. Points of Contact Table
- C. Actions Timetable
- D. Graphics/Maps
  - Launch/Reentry Site Description/Map
  - Aircraft Hazard Area Description/Map
  - Temporary Flight Restriction Description/Map

- Air Traffic Control Assigned Airspace Description/Map
- E. Commercial Launch/Reentry Site LOA

**Attachment A: Signatures**

\_\_\_\_\_

[Lead ATC Facility]

\_\_\_\_\_

[Operator]

\_\_\_\_\_

[ATO Space Operations]



\_\_\_\_\_

[as appropriate, other stakeholders, including Federal Ranges and military facilities]

**Attachment B: Points of Contact Table**

The following table should be completed by the [lead ATC facility] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[Operator]			
[Lead ATC Facility] Supervisor in Charge			
[Lead ATC Facility] Traffic Management Unit			
ATO Space Operations			
Central Altitude Reservation Function (CARF)			
National Traffic Management Office (NTMO)			

**Attachment C: Actions Timetable**

The following table should be completed by [lead ATC facility]. In coordination with the [lead ATC facility], [Operator] must ensure that the following actions are completed at the defined intervals.

Time	Event	Remarks	Date Completed
<b>T – [XX] months</b> Suggestion: T – 6 months	<b>Submit Launch/reentry Forecast Package</b>	<b>Operator should provide best estimate of all known launch/reentry dates for upcoming six months.</b>	
<b>T – [XX] calendar days</b> Suggestion: T – 30 – 60 calendar days	<b>Coordinate launch/reentry corridor/hazard area(s)</b>	<b>Operator should coordinate with ATO Space Operations and as appropriate, other affected facilities.</b>	
<b>T – [XX] calendar days</b> Suggestion: T – 10 calendar days	<b>Submit Pre-Planning Package</b>	<b>Operator should provide a description of the Aircraft Hazard Area(s), along with date(s) and time(s) for launch/reentry.</b>	

## Instructions for Letter of Agreement Template: Launch and Reentry Site

### Letter of Agreement

Effective:

Subject: Operations at [Name and location of Launch and Reentry Site]

#### 1. Purpose:

State the purpose of the Letters of Agreement (LOA), type(s) of anticipated operation (*if launch*: [horizontal/vertical]) [launch/reentry], frequency of proposed operation(s) (if known), and name and location of Launch and Reentry Site.

##### *Sample text:*

This LOA establishes a framework for the coordination and planning of procedures for [licensed/permitted] (*if launch*: [horizontal/vertical]) [launch/reentry] operations into the National Airspace System from [name and location of Launch and Reentry Site].

#### 2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

##### *Sample text:*

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the license or when modifications are made to the license.

#### 3. Scope:

List the affected ATC facilities; Launch/Reentry Site Operator; and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities, as applicable.

State that this LOA does not guarantee the approval of operations from the Launch and Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate letter of agreement with each Vehicle Operator.

State that this LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

State distribution of the LOA. The distribution should include, at a minimum, all signatories.

##### *Sample text:*

This LOA is pertinent to [ATC facilities and stakeholders; including ATO Space Operations] and [Launch/Reentry Site Operator]. It does not guarantee the approval of operations from the Launch/Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate LOA with each Vehicle Operator.

This LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

This LOA is to be distributed to the signatories, additional stakeholders, and the Office of Commercial Space Transportation (AST).

#### 4. Responsibilities:

State the responsibilities of the Site Operator, lead ATC Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

a. Procedures for notification and scheduling of operations, to include procedures for the issuance of Notices to Air Missions, Altitude Reservations and Special Activity Airspace access.

b. Plans for communication between the operator and the FAA as necessary, before, during, and after a scheduled operation.

■ **[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations,  
[Launch and Reentry Site Operator]**

- c. Plans and procedures for cancellations, contingencies, and emergencies.
- d. Plans and procedures for any other measures deemed necessary by the FAA to ensure public health and safety.

*Sample text:*

- a. [Launch/Reentry Site Operator] is responsible for the management, operation, and maintenance of the Launch/Reentry Site. This includes the coordination with users of its facility and the responsibility for ensuring all necessary information regarding operations is provided to the appropriate ATC facilities.
- b. The FAA is responsible for the safe, orderly, and expeditious flow of known air traffic under its control. It is also responsible for the dissemination of pertinent information to the aviation community.
- c. All parties named in this LOA will work collaboratively to develop procedures and other such measures deemed necessary to protect public health and safety.

**5. Attachments**

State the responsibilities of the Site Operator, lead ATC Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

- A. Signatures
- B. Points of Contact Table
- C. Graphics/Maps
  - Physical Site Description/Map
  - Airspace Description/Map(s)



**[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations, [Redacted]  
[Launch and Reentry Site Operator]**

**Attachment A: Signatures**

\_\_\_\_\_

[Lead ATC Facility]

\_\_\_\_\_

[Launch/Reentry Site Operator]

\_\_\_\_\_

[ATO Space Operations] [Redacted]

\_\_\_\_\_

[As appropriate, other stakeholders, including Federal Ranges and military facilities.]

**[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations,  
[Launch and Reentry Site Operator]**

#### **Attachment B: Points of Contact Table**

The following table should be completed by the [lead ATC facility] and the information should be verified prior to every operation.

<b>Office</b>	<b>Phone #</b>	<b>Email</b>	<b>Responsibility</b>
<b>[Primary ATC Facility] Airspace and Procedures Office</b>			
<b>[Primary ATC Facility] Traffic Management Unit</b>			
<b>ATO Space Operations</b>			
<b>[Launch and Reentry Site Operator]</b>			

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# BRIEFING GUIDE



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

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Initiated By: AJV-0  
Vice President, Mission Support Services

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**1. PARAGRAPH NUMBER AND TITLE:**

1–2–4. ABBREVIATIONS

2–1–6. CHECKING ACCURACY OF PUBLISHED DATA

3–1–1. BASIC EQUIPMENT

6–3–4. FLIGHT DATA UNIT

6–3–5. CHANGES TO MTR AND MOA PUBLISHED ACTIVITY SCHEDULES

6–10–2. REQUIREMENTS

12–1–2. IMPLEMENTATION

18–7–4. TYPES OF TMIS

19–1–9. EXAMPLE OF SPECIAL PROVISIONS

20–1–5. TFR NOTAM CONTENT

21–2–2. TACTICAL OPERATIONS SECURITY GROUP RESPONSIBILITIES

Appendix 6. Commercial Space LOA Sample Templates

**2. BACKGROUND:** The Federal Women's Program (FWP) made the determination that the term Notice to Airmen did not represent all aviators. Hence, the term itself is modified to show gender neutrality.

**3. CHANGE:****OLD****1–2–4. ABBREVIATIONS**

As used in this order, the following abbreviations have the meanings indicated: (See TBL 1–2–1.)

*TBL 1–2–1***ABBREVIATIONS**NOTAM . . . . . Notice to Airmen**NEW****1–2–4. ABBREVIATIONS**

No Change

No Change

NOTAM . . . . . Notice to Air Missions**OLD****2–1–6. CHECKING ACCURACY OF PUBLISHED DATA**

Air traffic managers and air traffic representatives (ATREPs) must ensure, upon receipt of official publications, that a review of data pertaining to their facilities and areas of concern is accomplished to ensure accuracy and completeness. When pertinent national procedures, aeronautical data (to include weather reporting locations), or flight procedures are created or changed, review facility standard operating procedures (SOPs) directives, position/ sector binders, reference files, and/or letters of agreement (LOAs) and initiate corrections and briefings as required.

**NOTE–**

**1.** *Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures/](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/)*

**NEW****2–1–6. CHECKING ACCURACY OF PUBLISHED DATA**

No Change

No Change



2. Additional digital AeroNav Products are available via the following websites:

- a. [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/procedures](https://www.faa.gov/air_traffic/flight_info/aeronav/procedures)
- b. <http://aerochart.faa.gov>

3. Information on aeronautical data changes, including weather reporting locations, is available for free at the Aeronautical Information Services (AJV-A), Aeronautical Data web portal. Check 28-Day Subscription and Transmittal Letters at [https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/aero\\_data/](https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/)

4. Notice to Airman information may be viewed on the Aeronautical Information System Replacement (AISR) or at <https://notams.aim.faa.gov/notamSearch>.

**REFERENCE–**

FAA Order JO 7210.3, Para 2 –1 –2, Facility Standard Operating Procedures Directive.  
 FAA Order JO 7210.3, Para 2 –1 –3, Position/Sector Binders.  
 FAA Order JO 7210.3, Para 2 –2 –11, Personnel Briefings Regarding Orders, Published Aeronautical Data and Flight Procedures.  
 FAA Order JO 7210.3, Para 4 –3 –3, Developing LOA.  
 FAA Order JO 7210.3, Para 4 –3 –7, Annual Review/Revisions.  
 FAA Order JO 7930.2, Notices to Airmen (NOTAM).  
 FAA Order JO 8260.19, Flight Procedures and Airspace.  
 FAA Order JO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).  
 FAA Order JO 8260.43, Flight Procedures Management Program.

**OLD**

**3–1–1. BASIC EQUIPMENT**

**Title through b3 NOTE**

4. Air traffic facilities that use electronic IDS must ensure that all displayed information is current. Facilities must ensure that any information with a scheduled expiration is removed from the controller display at the time of expiration. If the system is capable of automatically removing expired information, it must be configured to do so.

**NOTE–**

This includes Notice to Airmen (NOTAM) information which may be viewed on the Aeronautical Information System Replacement (AISR) or at: <https://notams.aim.faa.gov/notamSearch>.

**OLD**

**6–3–4. FLIGHT DATA UNIT**

**Title through c3(c)**

(d) FAA Order JO 7930.2, Notices to Airmen (NOTAM).

No Change

No Change

4. Notice to Air Missions information may be viewed on the Aeronautical Information System Replacement (AISR) or at <https://notams.aim.faa.gov/notamSearch>.

**REFERENCE–**

FAA Order JO 7210.3, Para 2–1–2, Facility Standard Operating Procedures Directive.  
 FAA Order JO 7210.3, Para 2–1–3, Position/Sector Binders.  
 FAA Order JO 7210.3, Para 2–2–11, Personnel Briefings Regarding Orders, Published Aeronautical Data and Flight Procedures.  
 FAA Order JO 7210.3, Para 4–3–3, Developing LOA.  
 FAA Order JO 7210.3, Para 4–3–7, Annual Review/Revisions.  
 FAA Order 7930.2, Notices to Air Missions (NOTAM).  
 FAA Order JO 8260.19, Flight Procedures and Airspace.  
 FAA Order JO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).  
 FAA Order JO 8260.43, Flight Procedures Management Program.

**NEW**

**3–1–1. BASIC EQUIPMENT**

No Change

No Change

**NOTE–**

This includes Notice to Air Missions (NOTAM) information which may be viewed on the Aeronautical Information System Replacement (AISR) or at: <https://notams.aim.faa.gov/notamSearch>.

**NEW**

**6–3–4. FLIGHT DATA UNIT**

No Change

(d) FAA Order 7930.2, Notices to Air Missions (NOTAM).

**OLD****6-3-5. CHANGES TO MTR AND MOA  
PUBLISHED ACTIVITY SCHEDULES**

ARTCCs must use the procedures as outlined in FAA Order JO 7930.2, Notices to Airmen (NOTAM), paragraph 6-1-2, Special Activity Airspace (SAA), when MTR or MOA activity is scheduled to occur at other than published or charted times.

**OLD****6-10-2. REQUIREMENTS**

**Title** through **a1** *REFERENCE*

**2.** Notices To Airmen (NOTAMs). Facilities using ERIDS for NOTAM distribution must develop a backup plan in the event ERIDS becomes unavailable/unusable.

**OLD****12-1-2. IMPLEMENTATION**

**Title** through **a3(e)**

**b.** Revisions to TRSAs must be submitted to System Operations Airspace and Aeronautical Information Services (AIS) at least 9 weeks prior to one of the appropriate publication dates; i.e., Sectional Charts, Notice to Airmen, or the Chart Supplement U.S. The following are considered sufficient justification to warrant revision:

**OLD****18-7-4. TYPES OF TMIs**

**Title** through **h3(e)**

**(f)** Notices to Airmen.

**OLD****19-1-9. CANCELLATION OF WAIVERS  
AND AUTHORIZATIONS**

**Title** through *FIG 19-1-1*

**EXAMPLE OF SPECIAL PROVISIONS****NEW****6-3-5. CHANGES TO MTR AND MOA  
PUBLISHED ACTIVITY SCHEDULES**

ARTCCs must use the procedures as outlined in FAA Order 7930.2, Notices to Air Missions (NOTAM), paragraph 6-1-2, Special Activity Airspace (SAA), when MTR or MOA activity is scheduled to occur at other than published or charted times.

**NEW****6-10-2. REQUIREMENTS**

No Change

**2.** Notices to Air Missions (NOTAMs). Facilities using ERIDS for NOTAM distribution must develop a backup plan in the event ERIDS becomes unavailable/unusable.

**NEW****12-1-2. IMPLEMENTATION**

No Change

**b.** Revisions to TRSAs must be submitted to System Operations Airspace and Aeronautical Information Services (AIS) at least 9 weeks prior to one of the appropriate publication dates; i.e., Sectional Charts, Notice to Air Missions, or the Chart Supplement U.S. The following are considered sufficient justification to warrant revision:

**NEW****18-7-4. TYPES OF TMIs**

No Change

**(f)** Notices to Air Missions.

**NEW****19-1-9. CANCELLATION OF WAIVERS  
AND AUTHORIZATIONS**

No Change

No Change

These special provisions are for suggested use only. You will need to modify them or develop new ones depending on the proponent and the operating conditions.

1. Contact the [name of FAA facility] at [telephone number], not less than 24 hours or more than 48 hours prior to conducting any [name of event], for the purpose of issuing a Notice to Airmen.

### **OLD**

#### **20-1-5. TFR NOTAM CONTENT**

TFR NOTAMs must comply with procedures detailed in FAA Order JO 7930.2, Notices to Airmen (NOTAM).

### **OLD**

#### **21-2-2. TACTICAL OPERATIONS SECURITY GROUP RESPONSIBILITIES**

##### **Title through c**

**d.** Develop and coordinate the publication of flight advisories, Security Notices (SECNOT), and Notices to Airmen (NOTAM) enabling ATM security and/or other emergency operations efforts. This function includes the publication of Temporary Flight Restrictions (TFR) pursuant to Title 14 Code of Federal Regulations (CFR) Parts 99.7, Special security instructions; 91.141, Flight restrictions in the proximity of Presidential and other parties; and 91.137, Temporary flight restrictions in the vicinity of disaster/hazard areas.

### **OLD**

#### **Appendix 6. Commercial Space LOA Sample Templates**

##### **Title through Instructions for Letter of Agreement Template: Launch and Reentry Site, subparagraph 3**

#### **4. Responsibilities:**

State the responsibilities of the Site Operator, lead ATC Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

a. Procedures for notification and scheduling of operations, to include procedures for the issuance of Notices to Airmen, Altitude Reservations and Special Activity Airspace access.

No Change

1. Contact the [name of FAA facility] at [telephone number], not less than 24 hours or more than 48 hours prior to conducting any [name of event], for the purpose of issuing a Notice to Air Missions.

### **NEW**

#### **20-1-5. TFR NOTAM CONTENT**

TFR NOTAMs must comply with procedures detailed in FAA Order 7930.2, Notices to Air Missions (NOTAM).

### **NEW**

#### **21-2-2. TACTICAL OPERATIONS SECURITY GROUP RESPONSIBILITIES**

No Change

**d.** Develop and coordinate the publication of flight advisories, Security Notices (SECNOT), and Notices to Air Missions (NOTAM) enabling ATM security and/or other emergency operations efforts. This function includes the publication of Temporary Flight Restrictions (TFR) pursuant to Title 14 Code of Federal Regulations (CFR) Parts 99.7, Special security instructions; 91.141, Flight restrictions in the proximity of Presidential and other parties; and 91.137, Temporary flight restrictions in the vicinity of disaster/hazard areas.

### **NEW**

#### **Appendix 6. Commercial Space LOA Sample Templates**

No Change

No Change

No Change

a. Procedures for notification and scheduling of operations, to include procedures for the issuance of Notices to Air Missions, Altitude Reservations and Special Activity Airspace access.

**1. PARAGRAPH NUMBER AND TITLE:**

2-1-5. RELEASE OF INFORMATION  
 2-1-9. HANDLING BOMB THREAT INCIDENTS  
 2-1-23. FACILITY IDENTIFICATION  
 2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY  
 2-5-4. RELIEF PERIODS  
 2-5-8. SUPERVISORS HOURS OF DUTY  
 2-5-9. FACILITY COMPLEMENTS  
 2-5-10. CONTROLLER-IN-CHARGE (CIC) TRAINING  
 2-7-5. FACILITY SECURITY  
 3-1-1. BASIC EQUIPMENT  
 3-4-1. USE OF RECORDERS  
 3-4-3. CHECKING AND CHANGING RECORDING EQUIPMENT  
 4-3-2. APPROPRIATE SUBJECTS  
 7-2-2. AMPLITRON OR PARAMETRIC AMPLIFIER FAILURE

**2. BACKGROUND:** In the past few years, as pilots have gravitated toward automated resources for filing flight plans and obtaining weather briefings, Flight Services (AJR-B) has likewise transformed the way it has provided services to its users. AJR-B is in the process of reviewing and updating all of its directives, including relevant sections of FAA Order JO 7210.3, Facility Operation and Administration, to better reflect how services will be provided in the future.

**3. CHANGE:**

<u>OLD</u>	<u>NEW</u>
<b>2-1-5. RELEASE OF INFORMATION</b>	<b>2-1-5. RELEASE OF INFORMATION</b>
Title through b5	No Change
Add	<b><u>c. Federal Contract Flight Service Stations (FCFSS) must handle the release of information in accordance with contract requirements.</u></b>
<u>OLD</u>	<u>NEW</u>
<b>2-1-9. HANDLING BOMB THREAT INCIDENTS</b>	<b>2-1-9. HANDLING BOMB THREAT INCIDENTS</b>
Title through f	No Change
g. Consideration should be given to establishing an alternate site to provide limited flight service or airport air traffic and approach control services.	No Change
Add	<b><u>NOTE- Processes for the establishment of alternate sites and divestiture of airspace/responsibilities are outlined in FAA Order JO 1900.47 and facility Operational Contingency Plans (OCPs).</u></b>

**OLD****2-1-23. FACILITY IDENTIFICATION**

a. Service Area Directors are the focal point to review/approve requests for waivers for facility identification changes in FAA Order JO 7110.65, Air Traffic Control, Paragraph 2-4-19, Facility Identification, subparagraphs a, b, and c, and FAA Order JO 7110.10, Flight Services, paragraph 14-1-14, Facility Identification, subparagraphs a, b, and c. If the waiver request is approved, the Service Area Director must 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.

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

Title through a

b. All operational personnel, prior to working their first control position of their duty day, must view and listen to the recorded Center Weather Service Unit (CWSU) briefing, when available.

**OLD****2-5-4. RELIEF PERIODS**

Title through c

d. Supervisors must not condone or permit individuals to sleep while on duty. Any such instance must be handled in accordance with Human Resource Policy Manual (HRPM), Standards of Conduct.

**OLD****2-5-8. SUPERVISORS 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.

**NEW****2-1-23. FACILITY IDENTIFICATION**

a. Service Area Directors are the focal point to review/approve requests for waivers for facility identification changes in FAA Order JO 7110.65, Air Traffic Control, paragraph 2-4-19, Facility Identification, subparagraphs a, b, and c. **The Flight Service Safety and Operations Group (AJR-B100) is the focal point to review/approve requests for waivers for facility identification changes in** FAA Order JO 7110.10, Flight Services, paragraph **11**-1-14, Facility Identification, subparagraph **f**. If the waiver request is approved, the Service Area Director **or the Director of Flight Service, as appropriate,** must 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.

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

No Change

b. All operational personnel, **with the exception of Flight Service Specialists,** prior to working their first control position of the duty day, must view and listen to the recorded Center Weather Service Unit (CWSU) briefing, when available.

**NEW****2-5-4. RELIEF PERIODS**

No Change

d. Supervisors must not condone or permit individuals to sleep while on duty. Any such instance must be handled in accordance with Human Resource Policy Manual (HRPM), Standards of Conduct, **or applicable corporate policy (for FCFSS contract facilities).**

**NEW****2-5-8. SUPERVISORS HOURS OF DUTY (ALASKA ONLY)**

Hours of duty of facility air traffic managers and administrative staffs should conform with the duty hours of **the Alaska Flight Service Information Area Group.**

**OLD****2-5-9. 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.

**OLD****2-5-10. CONTROLLER-IN-CHARGE (CIC) TRAINING**

a. Prior to being designated as CIC, specialists must have been facility/area rated/certified for 6 months, except as provided in paragraph 2-6-3c. The specialist must also have completed an agency-approved and established CIC training course for the assigned option (that is, En Route CIC, Course 55072; National Flight Service CIC, Course 55025; or Terminal CIC, Course 55073). The Director of Flight Services Operations may issue a facility waiver for the 6 months criteria where a more immediate assignment is indicated. Upon receipt of a waiver from the Director of Flight Services Operations the facility manager can then issue individual waivers to the 6 months requirement on a case-by-case basis. Waivers to facilities will be for 1 year with renewals based on the result of a yearly evaluation by the region.

***NOTE-***

*In facilities that use CICs to provide midwatch coverage, all facility/area rated/certified specialists that provide such coverage must complete an agency-approved and established CIC training course for the assigned option as described above, within 30 days of final certification/rating.*

**NEW****2-5-9. FACILITY COMPLEMENTS  
(ALASKA ONLY)**

Facility air traffic managers will be informed by the **Alaska Flight Service Information Area Group** 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.

**NEW****2-5-10. CONTROLLER-IN-CHARGE (CIC)/DESIGNATED LEAD SPECIALIST (DLS) TRAINING**

a. Prior to being designated as CIC/**DLS**, specialists must have been facility/area rated/certified for 6 months, except as provided in paragraph 2-6-3c. The specialist must also have completed an agency-approved and established CIC/**DLS** training course for **Flight Service (Alaska) or Federal Contract Flight Service Stations (FCFSS)**. The Director of Flight Service may issue a facility waiver for the 6 months criteria where a more immediate assignment is indicated. Upon receipt of a waiver from the Director of Flight Services, the facility manager can then issue individual waivers to the 6 months requirement on a case-by-case basis. Waivers to facilities will be for 1 year with renewals based on the result of a yearly evaluation by the region.

***NOTE-***

*In facilities that use CICs/**DLSs** to provide midwatch coverage, all facility/area rated/certified specialists that provide such coverage must complete an agency-approved and established CIC/**DLS** training course for **Flight Service** as described above, within 30 days of final certification/rating.*

**b.** Specialists that have completed the CIC course, who have performed CIC duties, and who subsequently transfer to another facility must be required to complete those portions of the course that are specific to the new facility before assuming CIC duties, except as provided in paragraph 2–6–3. They must not be required to fulfill the 6 months experience requirement at the new facility.

**c.** Upon completion of the CIC course, record an entry noting this in the specialist’s Training and Proficiency Record, FAA Form 3120–1, section 3, or TRAX, Automated Training Record.

### **OLD**

#### **2–7–5. FACILITY SECURITY**

**a.** Facility air traffic managers are responsible for the security of operating quarters and must use appropriate agency directives for guidance in maintaining this security. This is not applicable to pilot briefing areas in flight service stations except when the FSS is collocated with an ARTCC.

**b.** When an ARTCC and a FSS are collocated, a LOA must be implemented to define the respective areas of security responsibility assigned to each facility.

**REFERENCE–**  
*FAA Order JO 7210.3, Subpara 4–3–2e, Appropriate Subjects.*

**c** and **d**

### **OLD**

#### **3–1–1. BASIC EQUIPMENT**

**Title through b4 NOTE**

**c.** The basic operating equipment for FSSs consist of radio and landline communications equipment, flight progress boards, pilot briefing equipment, recorders, “data communication” equipment, displays of aeronautical and meteorological information, direction-finding equipment, aircraft orientation plotting boards, “orientation, direction-finding equipment and aircraft orientation” arranged according to master plans maintained in Flight Service Area offices. Air traffic managers may recommend changes to these plans.

**b.** Specialists that have completed the CIC/**DLS** course, have performed **such** duties, and subsequently transfer to another facility, must be required to complete those portions of the course that are specific to the new facility before assuming CIC/**DLS** duties, except as provided in paragraph 2–6–3. They must not be required to fulfill the 6 months experience requirement at the new facility.

**c.** Upon completion of the CIC/**DLS** course, record an entry noting this in the specialist’s Training and Proficiency Record, FAA Form 3120–1, section 3 or **electronic equivalent; or the FCFSS equivalent**.

### **NEW**

#### **2–7–5. FACILITY SECURITY**

**a.** Facility air traffic managers are responsible for the security of operating quarters and must use appropriate agency directives for guidance in maintaining this security. This is not applicable to pilot briefing areas in flight service stations.

Delete

Delete

Re-letter **b** and **c**

### **NEW**

#### **3–1–1. BASIC EQUIPMENT**

No Change

**c.** The basic operating equipment for FSSs consists of radio and landline communications equipment, flight progress boards **(or electronic equivalent)**, pilot briefing equipment, recorders, data communications equipment, displays of aeronautical and meteorological information, **and** aircraft orientation plotting boards **(or electronic equivalent)**. Air traffic managers may recommend changes to these plans.

**OLD****3-4-1. USE OF RECORDERS**Title through **i**

**j.** 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.

**k** and **l****OLD****3-4-3. CHECKING AND CHANGING RECORDING EQUIPMENT**Title through **b2**

Add

**OLD****4-3-2. APPROPRIATE SUBJECTS**Title through **d3**

**e.** Between an ARTCC and an FSS: Define areas of security responsibility. (See Paragraph 2-7-5, Facility Security.)

**OLD****7-2-2. AMPLITRON OR PARAMETRIC AMPLIFIER FAILURE**Title through **b**

**c.** The OMIC must contact the associated FSS, which will then issue a NOTAM as required.

**NEW****3-4-1. USE OF RECORDERS**

No Change

Delete

Re-letter **j** and **k****NEW****3-4-3. CHECKING AND CHANGING RECORDING EQUIPMENT**

No Change

**3.** At Federal Contract Flight Service Stations, engineering staff will monitor the operational status of all audio recording equipment.

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

No Change

**e.** Between an ARTCC and an FSS: **Procedures for the assignment of DVFR and VFR beacon codes.**

**NEW****7-2-2. AMPLITRON OR PARAMETRIC AMPLIFIER FAILURE**

No Change

**c.** The OMIC must contact **Technical Operations**, which will then issue a NOTAM as required.

**1. PARAGRAPH NUMBER AND TITLE:****2-1-7. AIR TRAFFIC SERVICE DURING PLANNED AND UNPLANNED OUTAGES**

**2. BACKGROUND:** Operational Risk Management (ORM) was a TOP 5 Safety Issue. Air Traffic Control (ATC) and Technical Operations (Tech Ops) have collaborated to produce a Corrective Action Plan (CAP) which promotes, ensures, and improves planned outage coordination to reduce risk and avoid interruptions of Air Traffic Services.



## 3. CHANGE:

**OLD****2-1-7. AIR TRAFFIC SERVICE DURING PLANNED AND UNPLANNED OUTAGES**

Facilities must develop and maintain guidelines to provide continuity of required services during planned (for example, radar out for maintenance, frequency out for repair) or unplanned outages (for example, power failures, natural disasters).

a. For planned outages, facilities must maintain a checklist that provides guidance on approving shutdowns. This checklist should be maintained at an operational manager's position (for example, OMIC desk, FLM desk). Facilities should consider the following for inclusion on the checklist:

1. Traffic volume and complexity.

2. Weather.

3. Alternate means of providing air traffic services.

4. Procedures to notify affected facilities when planned outage begins and ends.

5. Other information related to the planned outage, as appropriate.

Add

Add

Add

**NEW****2-1-7. AIR TRAFFIC SERVICE DURING PLANNED AND UNPLANNED OUTAGES**

**The air traffic manager (ATM) must develop and maintain guidelines to provide continuity of required services during planned and, to the degree possible, during unplanned outages.**

**a. The ATM must collaborate with Technical Operations (Tech Ops) during any projected planned maintenance tasks that may impact air traffic control (ATC). The ATM must ensure affected air traffic stakeholders or appropriate subject matter experts (SMEs) are notified of planning meetings.**

Delete

Delete

Delete

Delete

Delete

**b. The ATM must review all project risk plans (PRP) received from Tech Ops. A PRP is a living document that promotes coordination and communication and reduces the risk to the National Airspace System (NAS) associated with project implementation. After review, the ATM must forward concur or non-concur via the notification email or directly through the corporate work plan portal link provided in the email. The ATM may forward questions or comments regarding the PRP directly through the notification email or by contacting the point of contact identified in the notification email.**

**c. Facility Standard Operating Procedures (SOP) must include the use of the Operational Risk Management Plan (ORMP), which is the formal document for review and approval that includes the plan for ATC to protect continuity of service.**

**NOTE-**

**Operational Risk Management (ORM) training is available via eLMS.**

- Add **1. The ORMP must be used in conjunction with local procedures to support the completion of formal ORM maintenance activities and projects.**
- Add **2. Certain maintenance tasks that do not meet the criteria identified in subparagraph c1 may still have the potential for operational consequences locally. Air Traffic and Technical Operations should jointly identify these additional maintenance activities that will require an ORMP.**
- Add **d. The ATM must develop an ORM section in the facility SOP. The facility SOP must identify persons or positions authorized to review and/or approve ORMPs for the facility. Additionally, the SOP must identify communication procedures to ensure team members are notified in a timely manner of their team participation responsibilities.**
- Add **e. All air traffic personnel identified in an ORMP are team members. Additional team members may be added for informational and increased situational awareness purposes and should address any concerns through the point of contact (POC)/reviewer or approver. The required air traffic team members consist of POC/reviewer and approver. Air traffic team members must:**
- Add **1. Add additional team members as necessary.**
- Add **2. Participate in ORMP meetings.**
- Add **3. Review and comment on the ORMP.**
- Add **4. Assess operational risks, identify any conflicting activities, and propose mitigations.**
- Add **5. Maintain situational awareness until completion of the activity.**
- Add **6. Contact the air traffic POC if the situation changes or the ORMP requires reassessment.**
- Add **f. The air traffic POC/reviewer is responsible for coordination of the ORMP meeting with all affected air traffic stakeholders. The air traffic POC/reviewer:**

Add	<b><u>1. Reviews the composition of the ORMP team and ensures the appropriate air traffic team members and/or air traffic approver have been assigned. When more than one facility is affected, ORMPs may require multiple reviewers or approvers.</u></b>
Add	<b><u>2. Adds team members as appropriate.</u></b>
Add	<b><u>3. Participates in ORMP meetings.</u></b>
Add	<b><u>4. Ensures the completeness and feasibility of executing the ORMP, (shares responsibility with the air traffic approver).</u></b>
Add	<b><u>5. Identifies any conflicting activities.</u></b>
Add	<b><u>6. When the ORMP has been submitted for Air Traffic review, completes the air traffic mitigation plan element and submits the ORMP for approval. The System Support Center (SSC) manager will submit the plan to the Air Traffic and Tech Ops approvers.</u></b>
Add	<b><u>7. Ensures the affected air traffic personnel are briefed and prepared to implement mitigations prior to commencing work.</u></b>
Add	<b><u>g. The Air Traffic and Tech Ops approvers are responsible for the final review of the ORMP. Plans approved by Air Traffic and Tech Ops approvers are forwarded to Tech Ops personnel to perform the agreed-upon work. If a plan is not approved, the approver will select the Take 5 button in the ORMP tool and will notify the SSC manager or the initiator of their concern. The approvers:</u></b>
Add	<b><u>1. Ensure the completeness and feasibility of executing the ORMP (shared responsibility with the air traffic POC/reviewer).</u></b>
Add	<b><u>2. Approve the ORMP or select the Take 5 button with comments for additional consideration or follow-up.</u></b>
Add	<b><u>3. Change role assignments or team members as necessary.</u></b>
Add	<b><u>4. Identify any conflicting activities.</u></b>
Add	<b><u>5. Ensure the High Visibility Event flag is set when it meets the appropriate definition outlined below.</u></b>

Add

**NOTE–**

**High Visibility Events are those that require upper management awareness because of their potentially significant impact on the NAS. These are events that if the worst–case scenario occurs, even with mitigations in place, could cause a hazardous situation in the NAS, change Operational Contingency Level (OCL), create a significant increase in workload for ATC, or cause aircraft to be held or diverted, especially at High Impact facilities.**

Add

**h. The majority of interactions with Tech Ops will not involve a PRP or an ORMP. Therefore, the facility must develop and incorporate procedures into the facility SOP for the coordination of maintenance activities which may affect the ability of the facility to provide air traffic services. These procedures must be consistent with the Principles of ORM outlined below and take into consideration the facility's unique operational circumstances. Air traffic personnel will use these procedures when coordinating and executing planned outages and maintenance tasks with Tech Ops.**

Add

**i. Principles of ORM.**

Add

**1. Situational Awareness. Understand the current state and dynamics of the operation and remain vigilant for future changes and developments. Considerations include:**

Add

**(a) Peak and off–peak traffic periods.**

Add

**(b) Weather conditions.**

Add

**(c) Known concurrent activities that could impact, or be impacted by this activity. Example: VIP movement, airshows, other outages, etc.**

Add

**(d) Additional outages in your facility or adjacent facility.**

Add

**(e) Current staffing/operational oversight.**

Add

**(f) Other communication/surveillance equipment available as an alternate means of providing air traffic services.**

Add

**2. Plan Actions. The method and resources needed to accomplish the activity. Considerations include:**

Add

**(a) Review break rotations/staffing plan to ensure positions are staffed accordingly.**

Add

**(b) Review applicable (e.g., FAA Order JO 1900.47) Air Traffic Control Operational Contingency Plans.**

- Add (c) Brief affected staff prior to outages of the credible risks and potential impacts including worst-case scenarios and alternate procedures.
- Add (d) Identify the Tech Ops POC if immediate contact is needed.
- Add (e) Test back-up equipment before releasing the primary equipment to be worked on (where applicable).
- Add 3. Identify operational consequences. Identify the NAS systems and air traffic stakeholders that will, or could potentially be affected during the execution of the plan. Considerations include:
- Add (a) Credible risks and potential impacts including worst-case scenarios that could affect air traffic's ability to provide service.
- Add (b) Affected facilities, sectors/areas, positions, or other stakeholders participating in, or potentially impacted by the activity.
- Add (c) Adverse effects to ATC personnel safety.
- Add 4. Communicate. An ongoing exchange of information between Technical Operations and air traffic personnel is essential for the review of the potential operational consequences and development of mitigation strategies. The information must be received, understood, and, in some cases, approved. Considerations include:
- Add (a) Identified credible risks and potential impacts including worst-case scenarios.
- Add (b) Mitigation Strategies.
- Add (1) Include using the back-up equipment/systems, alternate channels, etc.
- Add (2) Confirm proper operation of support equipment, standby equipment and/or backup systems prior to conducting the scheduled activity.
- Add (3) Confirm Technical Operations and Air Traffic are prepared to implement their mitigation strategies.
- Add (c) Notify Tech Ops immediately of any circumstances that may affect the procedure/task, e.g., change in operational hours, unusual circumstances, or operational configurations.

- Add (d) “Take-5,” if needed (to gain more information or reassess approval).
- Add (e) Discuss and/or document effectiveness of plan for future reference or training.
- Add 5. Coordinate. Considerations include:
- Add (a) Coordinating the activity with the appropriate adjacent facilities.
- Add (b) Additional coordination and notification requirements should there be a change to planned activity.
- Add (c) Notify Regional Operations Center (ROC), Domestic Events Network (DEN), or facility management (when applicable).
- Add (d) Verify the equipment status and configuration upon completion of the activity.
- Add (e) Ensuring that Out for Maintenance (OFM) and Return to Service (RTS) are recorded on FAA Form 7230-4, Daily Record of Facility Operations.

**b. Facilities** must develop and maintain operational plans for unplanned outages that provide continuity of services to the extent dictated by the outage (for example, power failures, fire, flood, storm damage, breakdown of critical system components, facility wide outages). The plans must be in accordance with JO 1900.47.

**j. For unplanned outages, the ATM** must develop and maintain operational plans that provide continuity of services to the extent dictated by the outage. The plans must be in accordance with FAA Order JO 1900.47.

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## 1. PARAGRAPH NUMBER AND TITLE:

- 2-1-32. REPORTING UNAUTHORIZED, HAZARDOUS, OR SUSPICIOUS UAS ACTIVITIES
- 2-1-33. USE OF UAS DETECTION SYSTEMS
- 2-1-34. USE OF COUNTER UNMANNED AIRCRAFT SYSTEMS (C-UAS)
- 2-2-4. DUTY FAMILIARIZATION AND THE TRANSFER OF POSITION RESPONSIBILITY

**2. BACKGROUND:** The number of suspected unauthorized UAS operations near airports is on the rise. As a result, many airport authorities are responding to these concerns by looking for ways to detect and mitigate the possible impact of malicious or errant UAS operations. In addition, legislation has granted the Department of Defense (DOD), Department of Energy (DOE), Department of Homeland Security (DHS), and Department of Justice (DOJ) the legal authorization to use Counter Unmanned Aircraft Systems (C-UAS) capabilities. This same legislation requires these departments and their component agencies to coordinate with the FAA to characterize, assess, and mitigate risks to the NAS. In response to these activities, in 2018 Air Traffic Services (AJT) provided ATC facilities with interim guidance, including a facility checklist on how to handle observations of suspicious UAS activity.

**3. CHANGE:****OLD****2-1-32. REPORTING UNAUTHORIZED, HAZARDOUS, OR SUSPICIOUS UAS ACTIVITIES**

All FAA Air Traffic Control facilities, Federal Contract Towers, and Flight Service Stations, must take the following actions for any reported or observed unauthorized, hazardous, or suspicious UAS activities:

a. Notify the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC) at (540) 422-4423/4424/4425 as soon as possible.

b. If the UAS activity is creating a hazard to air traffic, contact local law enforcement providing location, description, and other pertinent information regarding the activities.

c. Record the incident via the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program or, if CEDAR is not available, via the appropriate means, in accordance with FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting.

Add

Add

Add

Add

Add

**NEW****2-1-32. REPORTING SUSPICIOUS UAS ACTIVITIES**

Consistent with the provisions of Air Traffic Service, Duty, and Operational Priorities, all Air Traffic Control facilities, FAA Contract Towers, and Flight Service Stations must report suspicious UAS. Suspicious UAS operations may include operating without authorization; loitering in the vicinity of sensitive locations (e.g., national security and law enforcement facilities and critical infrastructure); or disrupting normal air traffic operations resulting in runway changes, ground stops, pilot evasive action, etc. Reports of a UAS operation alone do not constitute suspicious activity. Development of a comprehensive list of suspicious activities is not possible due to the vast number of situations that could be considered suspicious. ATC must exercise sound judgment when identifying situations that could constitute or indicate a suspicious activity.

a. Notify local authorities (e.g., airport/local law enforcement; airport operations; and/or the responsible Federal Security Director Coordination Center) in accordance with local facility directives, including Letters of Agreement with the airport owner/operator.

b. Report the incident to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).

No Change

d. Notify the air traffic manager.

e. Provide the following information when reporting the incident via the DEN and CEDAR:

1. UTC date and time of incident.

2. Reporting source(s).

3. Position: fixed radial distance, bearing and distance, landmark, altitude, and heading.

- Add **4. Flight behavior (i.e.,loitering, heading toward the airport).**
- Add **5. UAS type (e.g., quadcopter, fixed wing), if known.**
- Add **6. Report operational impacts in accordance with paragraph 21-4-1, Domestic Events Network (DEN), of this order.**
- Add **f. Attempt to obtain additional information relevant to the suspicious UAS including:**
- Add **1. Size and color.**
- Add **2. Number of reported/sighted UAS.**
- Add **3. Location of the person(s) operating the UAS.**
- Add **4. Remote pilot information including name, address, and phone number, if obtained by local law authorities or other verifiable means.**
- Add **g. Facilities must maintain a checklist that provides guidance on reporting suspicious UAS activities. At a minimum, this checklist must be available to Operations Supervisor (OS), Controller-in-Charge (CIC), and Operations Manager (OM) personnel. Facilities must consider the following for inclusion on the checklist:**
- Add **1. Items a through f of this paragraph.**
- Add **2. Contact information necessary for completing the notification requirements of this paragraph.**
- Add **3. Local factors that may be necessary in determining if an operation is suspicious (e.g., location of critical infrastructure).**
- Add **4. A requirement to notify the Regional Operations Center (ROC) for security-related events that may generate significant media or congressional interest as required by FAA Order JO 1030.3.**
- Add **5. Any other information as deemed necessary by the air traffic manager.**
- Add **REFERENCE-**  
**FAA Order JO 7110.65, Para 2-1-2, Duty Priority.**  
**FAA Order JO 7610.4, Para 7-3-1, Application.**  
**FAA Order JO 1030.3, Initial Event Response, Chapter 2, Upward Notification.**  
**FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting.**  
**Advisory Circular 91-57B, Exception for Limited Recreational Operations of Unmanned Aircraft.**  
**P/CG Term - Suspicious UAS.**



**OLD****NEW**

Add

**2-1-33. USE OF UAS DETECTION SYSTEMS**

Add

**Airport owners/operators or local enforcement may contact ATC facilities to coordinate their acquisition, testing, and operational use of UAS detection systems. These systems and how they are used may have implications for FAA regulations for airports; potentially affect ATC and other Air Navigation Services systems (e.g., RF interference with radars); and/or trigger airport responses (e.g., closing runways), which must be coordinated with ATC.**

Add

**a. Requests by airport authorities for ATC facility cooperation/authorization in the acquisition, testing, or use of UAS detection systems will be referred to the appropriate FAA Airports District Office (ADO). The ADO will initiate internal FAA coordination, including reviews by the responsible ATO offices and facilities.**

Add

**b. ATC facilities must not enter into any verbal or written agreement with a commercial vendor or an airport authority regarding UAS detection capabilities without prior coordination and approval from HQ-AJT-0.**

Add

**NOTE-**

**1. UAS detection systems do not include the interdiction components that characterize UAS mitigation technologies, also referred to as Counter Unmanned Aircraft System (C-UAS) technologies. Only select Federal Departments and Agencies have the legal authority to use C-UAS systems in the NAS. The FAA does not support the use of this technology by other entities without this legal authorization.**

Add

**2. The FAA does not advocate the use of UAS detection in the airport environment until appropriate policy and procedures are developed.**

**OLD****NEW**

Add

**2-1-34. USE OF COUNTER UNMANNED AIRCRAFT SYSTEMS (C-UAS)**

Add

**Select Departments and Agencies, which have been legally authorized to use this technology, are operationally using Counter Unmanned Aircraft System systems (C-UAS) in the NAS to protect certain facilities and assets. C-UAS systems are capable of disabling, disrupting, or seizing control of a suspicious UAS, and may integrate or be linked to UAS detection capabilities. These Departments and Agencies are required to coordinate with the FAA to assess and mitigate risks to the NAS posed by these C-UAS systems. These systems and their deployment may affect ATC and other Air Navigation Services systems (e.g., RF interference with radars); which could impact other air traffic in the vicinity including legitimate, compliant UAS flights. Additionally, the C-UAS may involve the response and deployment of ground/airborne operational security assets, which must be coordinated with ATC.**

Add

**a. The Joint Air Traffic Operations Command (JATOC) Air Traffic Security Coordinator (ATSC) team, which manages the Domestic Events Network (DEN), must notify affected ATC facilities when C-UAS systems are activated.**

Add

**NOTE–  
Only select Federal Departments/Agencies have been legally authorized to utilize C-UAS to cover certain facilities and assets, and with coordination with the FAA to address risks to the NAS. Risk mitigation for the NAS typically includes notification to potentially affected ATC facilities.**

Add

**b. The DEN must alert all ATC facilities affected by C-UAS deployment and JATOC National Operations Control Center (NOCC) of any possible operational impacts.**

Add

**1. The alerts will focus on real-time reporting regarding possible operational impacts of C-UAS activities providing the affected facilities with heightened awareness to potential flight and equipment anomalies; and will allow the facilities to take actions needed to sustain safe operations.**

Add

**2. The alerts must be made via landline communications and must not be broadcast over radios, shout lines, or direct dial lines to air traffic controllers on position.**

Add

**3. The affected ATC facilities must not discuss C-UAS operations with any outside entity.**

2-1-~~33~~ through 2-1-~~37~~Renummer 2-1-~~35~~ through 2-1-~~39~~**OLD**

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

**NEW**

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

Title through c1(d)(11)

No Change

Add

**(12). UAS activity of operational importance.**

**1. PARAGRAPH NUMBER AND TITLE:**

2-6-14. WORK ASSIGNMENTS AFTER SUSPENSION OR TERMINATION OF TRAINING

**2. BACKGROUND:** A review of FAA Order JO 7210.3, Facility Operation and Administration, paragraph 2-6-14, revealed the content conflicted with FAA Order JO 3120.4, Air Traffic Technical Training. The language of paragraph 2-6-14 is obsolete and is being removed per this change.

**3. CHANGE:**

**OLD****NEW**

**2-6-14. WORK ASSIGNMENTS AFTER SUSPENSION OR TERMINATION OF TRAINING**

Delete

**a. At the discretion of the Air Traffic Manager, a developmental/CPC-IT/TMC-IT/NTMS-IT/FPL-IT whose on-the-job training has been suspended may be assigned to work the positions on which he/she is certified.**

Delete

**b. A developmental/CPC-IT/TMC-IT/NTMS-IT/FPL-IT whose training has been terminated, must only be assigned positions that do not issue control instructions.**

Delete

**1. PARAGRAPH NUMBER AND TITLE:**

3-6-3. ATC RADAR BEACON SYSTEM DECODER CONTROL BOX CHECKS

**2. BACKGROUND:** Manual radar beacon system decoder control boxes are no longer used in any FAA ATC facility. Therefore, performance checks and documentation by operational personnel are not applicable.

**3. CHANGE:**

<u><b>OLD</b></u>	<u><b>NEW</b></u>
<b><u>3-6-3. ATC RADAR BEACON SYSTEM DECODER CONTROL BOX CHECKS</u></b>	Delete
<b><u>NOTE-</u></b> <i><u>Not applicable to STARS.</u></i>	Delete
<u>Facility air traffic managers must ensure that radar controllers perform daily performance checks of the decoder control box as follows:</u>	Delete
<u>a. Each controller is responsible for determining on a day-to-day basis if the operation of his/her decoder control box is satisfactory for ATC purposes. Decoder control box performance can be determined by checking all switches, thumbwheel code selectors, and selected channels to ensure that they are functioning properly. The actual operation of each channel should be checked by decoding a known target sequentially on each channel and observing it on both double and single slash. Notify the OMIC/OSIC if a malfunction is observed.</u>	Delete
<u>b. OMICs/OSICs must make an entry on FAA Form 7230-4 of any malfunctions and report same to the Technical Operations personnel on duty.</u>	Delete
<b><u>3-6-4 through 3-6-8</u></b>	Renumber <b><u>3-6-3</u></b> through <b><u>3-6-7</u></b>

**1. PARAGRAPH NUMBER AND TITLE:**

3-8-5. ESTABLISHING DIVERSE VECTOR AREA/S (DVA)  
10-3-15. GO-AROUND/MISSED APPROACH

**2. BACKGROUND:** Concern exists within the Flight Standards Service Flight Operations Group on the Air Traffic practice of leveraging the Diverse Vector Area (DVA) when vectoring below the minimum altitude for instrument operations during a missed approach or go-around. The concern stems from those DVAs that have a published climb gradient in excess of the minimum climb gradient. When a DVA has a higher than standard climb gradient published, there are obstacle penetrations of the diverse departure surface. When ATC vectors aircraft during a missed approach or go-around, that published climb gradient is not known to the flight crew. ATC does not issue the published climb gradient to the pilot because it cannot be issued in a timely manner to be useful to the pilot, and flight crews do not pre-brief takeoff minimums and/or departure procedure content when they are an arrival. Air Traffic has determined that in order to mitigate the Flight Operation Group's concerns, Air Traffic will cease utilizing the DVA to vector aircraft conducting go-arounds or missed approaches. Air Traffic will implement new procedures for handling the vectoring of a go-around or missed approach, to be documented in facility directives delineating the conditions required.

**3. CHANGE:****OLD****3-8-5. 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 respective 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/MIA. 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. Where established, reduced separation from obstacles, as provided for in TERPS diverse departure criteria, will be used to vector departing aircraft or vector aircraft conducting a missed approach/go-around, provided the aircraft is within the confines of the DVA when below the MVA/MIA. 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:

**NEW****3-8-5. ESTABLISHING DIVERSE VECTOR AREA/S (DVA)**

a. DVAs may be established at the request of the ATM at ATCT locations without published SIDs. DVA requests will be coordinated jointly with the appropriate Service Area respective OSG and Mission Support Services, Instrument Flight Procedures Group, for candidate airports within the facility's area of jurisdiction after considering and fulfilling the following steps:

Add

**1. DVAs should be considered when obstacles penetrate the airport's diverse departure obstacle clearance surface (OCS). The OCS is a 40:1 sloping surface and is intended to protect the minimum 200 feet/NM climb gradient. If there are no obstacle penetrations of this surface, then standard takeoff minimums apply, obstacle clearance requirements are satisfied, and vectoring of IFR aircraft is permitted below the MVA/MIA.**

Add

**2. When the OCS is penetrated, the Instrument Flight Procedures Group procedural designer may develop an obstacle departure procedure (ODP). An ODP may consist of obstacle notes, nonstandard takeoff minimums consisting of nonstandard ceiling and visibility or climb gradient, a specified departure route, or any combination thereof. If an ODP is developed for a runway, it may be a candidate for a DVA. The ATM must determine that sufficient surveillance coverage exists for any airport with a published instrument approach and an operating control tower.**

Add

**3. Where established, reduced air traffic separation from obstacles, as provided for in TERPS diverse departure criteria, can be used to vector departing IFR aircraft below the MVA/MIA.**

Add

**4. To assist in determining if obstacles penetrate the 40:1 surface, ATMs may request the Instrument Flight Procedures Group or the Service Center Flight Procedures Team (FPT) to provide a graphic depiction of any departure penetrations.**

a1 through a3(d)

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

(f) Facility Hours of Operation.

FIG 3-8-2

#### Sample DVA Memo

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

Renumber a5 through a7(d)

(e) Radar Type/Beacon Type. Provide whether the facility has an ASR-8/9 with Mode S beacon system **or ASR-11 with MSSR beacon.**

No Change

No Change

b. Forward DVA requests to the **Instrument Flight Procedures** Group through the appropriate Service **Center** 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 or for aircraft conducting a missed approach/go-around below the MVA/MIA 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/MIA.

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

d. IFR aircraft climbing within a DVA must not be assigned an altitude restriction below the MVA/MIA. When leaving the confines of the DVA, ensure the aircraft reaches the MVA/MIA or has reported leaving the altitude of the obstacle(s) for which the MVA/MIA 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/MIA. Missed approach/go-around aircraft must not be assigned headings until the aircraft passes the threshold and the assigned heading is not in excess of 90° left or right of the centerline heading of the runway for which the DVA was established.

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

Add

### OLD

## **10-3-15. GO-AROUND/MISSED APPROACH**

Title through a7 *REFERENCE*

Add

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

No Change

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

3. **Not utilizing a DVA when a SID or ODP has been assigned or when following missed approaches or go-around instructions.**

d. IFR aircraft climbing within a DVA must not be assigned an altitude restriction below the MVA/MIA, **and must reach the MVA/MIA before leaving the confines of the DVA.**

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

No Change

### REFERENCE-

FAA Order JO 7110.65, Para 5-6-3, Vectors Below Minimum Altitude.

### NEW

## **10-3-15. GO-AROUND/MISSED APPROACH**

No Change

**b. Where facilities vector aircraft conducting go-arounds or missed approaches below the minimum altitude for instrument operations, facility directives including LOAs, where applicable, must include:**

Add

**1. Authorized headings or range of headings from each runway end to be used for vectoring aircraft conducting missed approaches/go-arounds until reaching the MVA/MIA. Authorized headings must be evaluated by the Service Center FPT if newly designated, and when changes are made; and**

Add

**2. The display of those prominent obstacles on a video map, consistent with the assigned flight path, that influence the determination of the authorized headings. Prominent obstacles, as defined in the Pilot/Controller Glossary, can be determined with the assistance of the Service Center FPT. When no prominent obstacles are identified, the facility directive must include a statement of this determination.**

Add

**3. A statement that air traffic is responsible for terrain and obstruction avoidance when vectoring aircraft, not on a published procedure below the MVA/MIA during climbout, and are assumed to climb at the minimum climb gradient of 200 feet/NM.**

Add

**REFERENCE-**

**FAA Order JO 7110.65, Para 5-6-3, Vectors Below Minimum Altitude.**

**FAA Order 1050.1, Environmental Impacts: Policies and Procedures.**

**b through d**

Re-letter **c** through **e**

**1. PARAGRAPH NUMBER AND TITLE:**

4-3-1. LETTERS OF AGREEMENT

19-1-2. POLICY

19-1-3. RESPONSIBILITIES

**2. BACKGROUND:** Requests for VFR glider and balloon operations in Class A airspace have been received by numerous air traffic field facilities. The Air Traffic Organization (ATO) has been informed of Letters of Agreement (LOA) authored at the facility level and circumventing the required Flight Standards Service (FS) review, allowing manned balloons and glider clubs to operate VFR in Class A airspace without FS issuing the appropriate waivers or authorization to deviate from certain Title 14 Code of Federal Regulations (CFR) Part 91 regulations.

The purpose and intent of these LOAs with Air Traffic are to document criteria such as date/time/location/communication expectations. Air Traffic LOAs must not grant nor imply the waiver of or an authorization to deviate from any CFR whose responsibility is not that of the ATO. FS is responsible for ensuring the qualification of civil pilots, airworthiness of civil aircraft participating in these operations, and the safety of persons and property on the ground affected by these operations.



**3. CHANGE:****OLD****4-3-1. LETTERS OF AGREEMENT**

An LOA should be negotiated if the Air Traffic Manager deems it necessary to clarify responsibilities of other persons/facilities/organizations when specific operational/procedural needs require their cooperation and concurrence. A LOA should be prepared when it is necessary to:

a through c

d. Specify special operating conditions or specific air traffic control procedures.

Add

Add

Add

Add

**NEW****4-3-1. LETTERS OF AGREEMENT**

An LOA should be negotiated if the air traffic manager deems it necessary to clarify responsibilities of other persons/facilities/organizations when specific operational/procedural needs require their cooperation and concurrence. **For Class A airspace authorizations, do not negotiate an LOA intended to support recurring operations, before reviewing the guidance contained in Chapter 19 of this order regarding waivers, authorizations, or exemptions to the Code of Federal Regulations (CFR). An** LOA should be prepared when it is necessary to:

No Change

No Change

**1. LOAs for recurring VFR glider and balloon operations in Class A airspace must contain the following provision:**

**“This Letter of Agreement (LOA) does not grant nor imply the waiver of, or an authorization to deviate from, any part or subpart of the Code of Federal Regulations (CFR). All applicant(s) and/or operator(s) will coordinate with the responsible Flight Standards District Office in advance of planned or recurring VFR flight in Class A airspace.”**

**2. The Flight Standards Service (FS) is responsible for ensuring the qualification of civil pilots, airworthiness of civil aircraft, and the safety of persons and property on the ground as part of a waiver for which air traffic does not have issuing authority. Chapter 19 of this order references CFRs that require coordination with FS for these operations to occur.**

**NOTE–**

**Planned or recurring operations constitute those operations over a long period of time necessitating an LOA. Short-term periods, for example, a single day event, weekend, or similar short periods are accomplished through special provisions included with an FS approved Certificate of Waiver.**

**REFERENCE–**

**FAA Order 8900.1, Flight Standards Information Management System (FSIMS).**

**OLD****19-1-2. POLICY**

a. FAA Order 1100.5, FAA Organization–Field, delegates to the Service Operations Service Area Directors and Flight Standards Division Managers the Administrator’s authority to grant or deny a Certificate of Waiver or Authorization (FAA Form 7711–1), and permits the re–delegation of this authority. Further, re–delegation of the authority to grant or deny waivers or authorizations must be consistent with the functional areas of responsibility as described in FAA’s Rulemaking Manual, and may be limited if deemed appropriate.

b. Applications for a Certificate of Waiver or Authorization acted upon by a En Route and Oceanic Operations Service Area or Terminal Operations Service Area office will normally be processed in accordance with guidelines and standards contained herein, unless found to be in the best interest of the agency to deviate from them.

**OLD****19-1-3. RESPONSIBILITIES**

Title through a

b. Flight Standards, as designated by the Administrator, and described in FAA’s Rulemaking Manual, is responsible for providing advice with respect to the qualification of civil pilots, airworthiness of civil aircraft, and the safety of persons and property on the ground. Additionally, Flight Standards has the responsibility for the grant or denial of Certificate of Waiver or Authorization from the following sections of 14 CFR:

1. Section 91.119, Minimum safe altitudes: General;

Add

**b2** through **b4**

**5.** Any section listed in 91.905 as appropriate for aerobatic demonstrations and other aviation events,

**b6**

**NEW****19-1-2. POLICY**

a. **The** FAA delegates to the Service Area Director **of Air Traffic Operations** and Flight Standards Division Managers, the Administrator’s authority to grant or deny a Certificate of Waiver or Authorization (FAA Form 7711–1), and permits the re–delegation of this authority. Further, re–delegation of **this** authority to grant or deny waivers or authorizations must be consistent with the functional areas of responsibility as described in **the** FAA’s **Exemption/Rulemaking Process documents**, and may be limited if deemed appropriate.

b. Applications for a Certificate of Waiver or Authorization acted upon by a **Service Center Operations Support Group (OSG)** will normally be processed in accordance with guidelines and standards contained herein, unless found to be in the best interest of the agency to deviate from them.

**NEW****19-1-3. RESPONSIBILITIES**

No Change

b. Flight Standards, as designated by the Administrator, and described in FAA **Order 8900.1, Flight Standards Information Management System (FSIMS)**, is responsible for providing advice with respect to the qualification of civil pilots, airworthiness of civil aircraft, and the safety of persons and property on the ground. Additionally, Flight Standards has the responsibility for the grant or denial of Certificate of Waiver or Authorization from the following sections of 14 CFR:

No Change

**2. Section 91.135, Operations in Class A Airspace;**

Renum **b3** through **b5**

**6.** Any section listed in 91.905 as appropriate for aerobatic demonstrations and other aviation events;

Renum **b7**

**1. PARAGRAPH NUMBER AND TITLE:**

4-3-2. APPROPRIATE SUBJECTS

5-5-2. OPERATIONS

19-6-1. GENERAL

**2. BACKGROUND:** The FAA is committed to the safe integration of unmanned aircraft systems (UAS) in the NAS, including UAS operations on and near airports. In order to provide consistency, a standard process to evaluate and issue an appropriate determination is required when approving or denying these requests.

**3. CHANGE:****OLD****4-3-2. APPROPRIATE SUBJECTS**

Title through l

Add

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

No Change

**m. Between an air traffic control facility and a fixed site operating under Section 44809. For all operations occurring on-airport, follow procedures in FAA Order JO 7200.23, Processing of Unmanned Aircraft Systems Requests, Chapter 2, Processing of Section 44809 Authorization Requests.**

**OLD****5-5-2. OPERATIONS**

Title through f

Add

**NEW****5-5-2. OPERATIONS**

No Change

**g. For all operations occurring on-airport, follow procedures in FAA Order JO 7200.23, Processing of Unmanned Aircraft Systems Requests, Chapter 6, 14 CFR Part 91 Certificate of Waiver or Authorization (COA) Processing.**

**OLD****19-6-1. GENERAL**

Title through d

Add

**NEW****19-6-1. GENERAL**

No Change

**e. For all operations occurring on-airport, follow procedures in FAA Order JO 7200.23, Processing of Unmanned Aircraft Systems Requests, Chapter 3, Processing of 14 CFR Part 107.41 Airspace Authorization Request.**

**1. PARAGRAPH NUMBER AND TITLE: 12-4-1. POLICY**

**2. BACKGROUND:** New charting cycles pertaining to the frequency of chart updates are being implemented in this change.

**3. CHANGE:**

<b><u>OLD</u></b>	<b><u>NEW</u></b>
<b>12-4-1. POLICY</b>	<b>12-4-1. POLICY</b>
<b>Title through b</b>	<b>No Change</b>
c. Helicopter route charts <u>must be published individually, on a site-specific basis. They are not updated on a regular basis as are other visual charts. They will be updated when a significant number of changes have accumulated, or when safety related or major airspace modifications warrant the printing of a new chart. The <i>Dates of Latest Editions</i>, published by the National Ocean Service will serve as a notice when a new chart is about to be published and which editions of charts are currently in use.</u>	c. Helicopter route charts <b>are</b> published individually, on a <b><u>56-day cycle</u></b> .

**1. PARAGRAPH NUMBER AND TITLE:**

14-1-1. OPERATING POSITION DESIGNATORS  
 14-2-1. RESPONSIBILITY  
 14-2-3. POSITIONS/SERVICES  
 14-3-3. AIRPORT SEARCH ARRANGEMENTS  
 15-1-4. TELEPHONE LISTINGS  
 15-1-6. SUPPLY-SUPPORT  
 15-1-7. NWS OPERATIONS MANUAL  
 15-2-4. FSS-WSO/WFO ADJOINING  
 15-2-5. FSS-WSO/WFO NOT ADJOINING  
 15-2-7. FLIGHT PLANNING FORMS  
 16-1-3. ADDITIONAL TELEPHONE SERVICE  
 16-1-5. LEASED EQUIPMENT SUPPLIES  
 Chapter 17. Facility Statistical Data, Reports, and Forms  
 17-1-1. FORM USAGE  
 17-1-2. TOTAL FLIGHT SERVICES FORMULA  
 17-2-1. AIRCRAFT CONTACTED  
 17-3-4. FLIGHT PLAN FORMS  
 17-4-1. PILOT BRIEFING COUNT  
 17-5-1. COMPLETION OF MONTHLY ACTIVITY RECORD  
 17-5-3. MESSAGE TRAFFIC NUMBER RECORD  
 17-5-4. UNANNOUNCED MILITARY AIRCRAFT ARRIVALS  
 20-1-6. TFR INFORMATION

**2. BACKGROUND:** In the past few years, as pilots have gravitated toward automated resources for filing flight plans and obtaining weather briefings, Flight Service has likewise transformed the way it has provided services to its users. AJR-B is in the process of reviewing and updating all of its directives, including relevant sections of FAA Order JO 7210.3, Facility Operation and Administration, to better reflect how services will be provided in the future.

**3. CHANGE:****OLD****14-1-1. OPERATING POSITION  
DESIGNATORS**

Title through a

**NEW****14-1-1. OPERATING POSITION  
DESIGNATORS**

No Change

**OLD***TBL 14-1-1***Operating Position Designators**

	<i>Designator</i>	<i>Position</i>
<u>1.</u>	<u>AA</u>	<u>Airport Advisory</u>
<u>2.</u>	<u>BC</u>	<u>Broadcast</u>
<u>3.</u>	<u>C</u>	<u>Coordinator</u>
<u>4.</u>	<u>DSC</u>	<u>Data Systems Coordinator</u>
<u>5.</u>	FD	Flight Data
<u>6.</u>	IF	Inflight
<u>7.</u>	N	NOTAM
<u>8.</u>	OM	Operations Manager
<u>9.</u>	OS	Operations Supervisor
<u>10.</u>	PF	Preflight
<u>11.</u>	<u>STMCIC</u>	<u>Supervisory Traffic Management Coordinator-in-Charge</u>
<u>12.</u>	WO	Weather Observer

**NEW***TBL 14-1-1***Operating Position Designators**

	<b>Designator</b>	<b>Position</b>
<u>1.</u>	FD	Flight Data
<u>2.</u>	IF	Inflight
<u>3.</u>	N	NOTAM
<u>4.</u>	OM	Operations Manager
<u>5.</u>	OS	Operations Supervisor*
<u>6.</u>	PF	Preflight
<u>7.</u>	WO	Weather Observer

**\*The Operations Supervisor (OS) position may be staffed by an Operations Supervisor, a Controller-in-Charge (FAA) or Designated Lead Specialist (FCFSS).**

**OLD****14-2-1. RESPONSIBILITY**

**a.** The air traffic manager must provide position binders to include, but not be limited to, procedures for accomplishing position related duties and responsibilities as outlined below. Additionally, examples and formats must be included for seldom used procedures. Cross references to documents and lists contained in other publications may be used where applicable. The air traffic manager may assign those functions, detailed below, to the appropriate position(s) as facility needs dictate but must provide those items appropriate for each position in the binders.

**OLD****14-2-3. POSITIONS/SERVICES****a.** Broadcast:

**1.** Define broadcast area and list outlets.

**2.** List locations and weather products.

**3.** Specify broadcast hours.

**b** through **e**

**OLD****14-3-3. AIRPORT SEARCH  
ARRANGEMENTS**

FSS air traffic managers must arrange with the airport management of each civil landing area in the FSSs flight plan area, including private landing areas as appropriate, to be searched for an overdue or unreported aircraft upon request from the station. Request police assistance in searching unattended landing areas.

**14-3-4** through **14-3-6**

**NEW****14-2-1. RESPONSIBILITY**

**a.** The air traffic manager must provide position binders, **or electronic equivalent**, to include, but not be limited to, procedures for accomplishing position related duties and responsibilities as outlined below. Additionally, examples and formats must be included for seldom-used procedures. Cross-references to documents and lists contained in other publications may be used where applicable. The air traffic manager may assign those functions, detailed below, to the appropriate position(s) as facility needs dictate but must provide those items appropriate for each position in the binders.

**NEW****14-2-3. POSITIONS/SERVICES**

Delete

Delete

Delete

Delete

Re-letter **a** through **d**

**NEW**

Delete

Delete

Renumber **14-3-3** through **14-3-5**

**OLD****15-1-4. TELEPHONE LISTINGS**

FSS air traffic managers must ensure that appropriate telephone numbers are properly listed in telephone directories (including yellow pages when applicable) and in the Chart Supplement U.S. Include Fast File in the local directories, and ensure that Foreign Exchange, Enterprise, etc., are listed in the directories of the areas which they serve. Numbers should always be listed under the subheading Flight Service Station under United States Government, Department of Transportation, Federal Aviation Administration. When possible, list the primary pilot weather briefing number under the Frequently Requested Numbers section at the beginning of United States Government listings.

**EXAMPLE-**

United States Government  
Department of Transportation  
Federal Aviation Administration  
Flight Service Station  
(Address)

Pilot Weather Briefing <sup>1</sup>

Fast File Flight Plan

Facility Supervisor <sup>2</sup>

/1/ Parent FSS number for part-time FSSs.

/2/ Administrative number.

**OLD****15-1-6. SUPPLY-SUPPORT**

Equipment used exclusively for aviation observations will be procured, installed, operated, maintained, and supply-supported by FAA. Observational equipment; e.g., gust recorders, barographs, and rain gauges, serving multiple NWS/FAA purposes will be procured, installed, maintained, and supply-supported by NWS unless otherwise agreed to. To the maximum extent possible, each agency should avail itself of the facilities offered by the other in contracting for, installing, maintaining, and supply-supporting observational equipment on a non-reimbursable basis where appropriate.

**NEW****15-1-4. TELEPHONE LISTINGS**

FSS air traffic managers must ensure that appropriate telephone numbers are properly listed in telephone directories (including yellow pages when applicable) and in the Chart Supplement U.S. **In Alaska, include Fast File in local directories where that service is available.** Numbers should always be listed under the subheading Flight Service Station under United States Government, Department of Transportation, Federal Aviation Administration. When possible, list the primary pilot weather briefing number under the Frequently Requested Numbers section at the beginning of United States Government listings.

No Change

**NEW****15-1-6. SUPPLY-SUPPORT**

Equipment used exclusively for aviation observations will be procured, installed, operated, maintained, and supply-supported by FAA. Observational equipment; e.g., **AWOS/ASOS systems, Stand Alone Weather Sensors (SAWS), etc.**, serving multiple NWS/FAA purposes will be procured, installed, maintained, and supply-supported by NWS unless otherwise agreed to. To the maximum extent possible, each agency should avail itself of the facilities offered by the other in contracting for, installing, maintaining, and supply-supporting observational equipment on a non-reimbursable basis where appropriate.

**OLD****15-1-7. NWS OPERATIONS MANUAL**

a. Specialized Weather Services, Chapter D-20 through Chapter D-27, are distributed by Washington headquarters to all FSS facilities. When other D Chapters are required, facility managers must arrange for routine distribution through the respective Flight Services Operations Service Area Office.

b. If the listed Weather Service Operations Manuals (WSOM) and associated Operational Manual Letters (OML) are not available through FAA Distribution, those items annotated with an asterisk may be obtained from:

National Oceanic and Atmospheric Administration (NOAA) Logistics Supply Center 1510 East Bannister Road Building 1 Kansas City, Missouri 64131

Remaining documents may be obtained by contacting the Weather Service Evaluation Officer (WSEO) servicing your area.

c. Following is a list of the available chapters. They are amended and supplemented by the issuance of either a revision or an Operations Manual Letter (OML). When ordering, specify the effected D chapter, the revision or the OML, and include the issuance number and the date. (See TBL 15-1-1.)

**NEW**

Delete

Delete

Delete

Delete

**OLD****TBL 15-1-1****D-Chapter Listing**

<b><u>Chapter Title/Amendments</u></b>	<b><u>Issuance Number</u></b>	<b><u>Issuance Date</u></b>
WSOMD-20 Aviation Area Forecasts* OML 10-92* OML 11-92* OML 12-92*	91-3	5/3/91
WSOMD-21 Aviation Terminal Forecasts Rev 1 Rev 2 OML 3-85 OML 11-86 OML 1-91* OML 6-92* OML 5-93	84-14  85-1 88-4	10/26/84  1/22/85 3/11/88
WSOMD-22 Aviation In-Flight Weather Advisories*	91-7	5/22/91



WSOMD-23 Special Aviation Forecasts and Events	<u>79-11</u>	<u>8/23/79</u>
WSOMD-24 Wind and Temper- ature Aloft Forecasts OML 4-83	<u>81-18</u> <u>4-83</u>	<u>11/4/81</u> <u>2/7/83</u>
WSOMD-25 Support to AT Facilities OML 2-84	<u>84-1</u> <u>2-84</u>	<u>2/10/84</u>
WSOMD-26 Aviation Weather Warnings and Pilot Briefings Rev 1 OML 13-92* OML 7-92* OML 1-92*	<u>85-9</u> <u>88-8</u>	<u>8/26/85</u> <u>8/1/88</u>
WSOMD-27 In-Flight Reports from Pilots (PIREPs)	<u>73-1</u>	<u>1/23/73</u>
WSOMD-30 Transcribed Weather Broadcast Text Products	<u>88-3</u>	<u>2/5/88</u>
WSOMD-35 International Aviation Area Forecasts Rev OML 7-89	<u>74-20</u> <u>75-11</u>	<u>9/27/74</u> <u>5/29/75</u>
WSOMD-37 International Aviation Aerodrome Forecasts OML 7-88	<u>88-6</u>	<u>6/1/88</u>
WSOMD-38 International Aviation In-Flight Advisories OML 3-91* OML 3-90 OML 8-89	<u>88-5</u>	<u>5/27/88</u>
WSOMD-79 National Weather Service Flight Operations	<u>83-8</u>	<u>4/27/83</u>
WSOMD-82 Training Program for Pilot Weather Briefers Rev 1 Rev 2* OML 8-92	<u>89-8</u> <u>90-10</u> <u>92-2</u>	<u>8/17/89</u> <u>11/27/90</u> <u>4/28/92</u>

**D-Chapter Listing – continued**

<b><u>Chapter Title/Amendments</u></b>	<b><u>Issuance Number</u></b>	<b><u>Issuance Date</u></b>
WSOMD-83 Aviation Weather Seminars and Safety Clinics	<u>74-19</u>	<u>9/16/74</u>
WSOMD-90 Weather Support for Accident Investigations and Litigation OML 3-92	<u>89-1</u>	<u>2/15/89</u>
<p><i>* If not available through FAA Distribution, may be ob- tained from:</i></p> <p><i><u>NOAA Logistics Supply Center</u></i>  <u>1510 East Bannister Road</u>  <u>Building 1</u>  <u>Kansas City, Missouri 64131.</u></p>		

**NEW**

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**OLD****15-2-4. FSS-WSO/WFO ADJOINING**

When the offices are adjoining, the aviation briefing facilities should be combined to the extent practicable for efficient weather briefing service. A joint display should provide all needed aviation weather information. The briefing function will be conducted in accordance with local agreements prepared by the NWS and the FAA regions and based on interagency policy. Normally, briefings will be provided by FSS personnel. The NWS will provide support by providing and updating briefing material, consultation with the FSS briefers, and direct briefing service to the aviation user when requested by the user or the FSS specialists.

**NEW**

Delete

Delete

**OLD****15-2-5. FSS-WSO/WFO NOT ADJOINING**

At locations where joint briefing displays are not practicable, cooperative briefing service may be furnished by means of a one-call phone arrangement. This system provides for all aviation weather briefing telephone requests to be received in the FSS on lines listed under the FSS. By a switching arrangement, the pilot can be referred to the WSO/WFO when requested by the pilot.

**15-2-6 through 15-2-9**

**OLD****15-2-7. FLIGHT PLANNING FORMS**

FSS facility managers must assure FAA Form 7233-1, Flight Plans, are available in the pilot briefing area for use by pilots. Maintain a sufficient supply to provide additional copies, as needed, to pilots, aviation companies, and organizations on request.

**OLD****16-1-3. ADDITIONAL TELEPHONE SERVICE**

Submit operational justification for additional local telephone service to the service area office when a facility receives or makes telephone calls amounting to an aggregate of more than 20 minutes per line during a normal daily peak hour. The rotary system must be used for this service.

**16-1-4 and 16-1-5**

**OLD****16-1-5. LEASED EQUIPMENT SUPPLIES**

a. FSSs equipped with Leased Service A Systems (LSAS) must provide all expendable items. These should normally be obtained through the FAA supply system.

b. Paper used in the LSAS monitor printer must be retained for 15 days.

c. OASIS. The vendor provides a basic quantity of consumable supplies on a yearly basis. The FAA must provide anything beyond this basic allotment.

**NEW**

Delete

Delete

Renumber **15-2-4** through **15-2-7**

**NEW****15-2-5. FLIGHT PLANNING FORMS**

FSS facility managers must assure FAA **Form 7233-4, International Flight Plan, and/or** Form 7233-1, Flight Plan, **as needed**, are available in the pilot briefing area for use by pilots. Maintain a sufficient supply to provide additional copies, as needed, to pilots, aviation companies, and organizations on request.

**NEW**

Delete

Delete

Renumber **16-1-3** and **16-1-4**

**NEW****16-1-4. LEASED EQUIPMENT SUPPLIES**

Delete

Delete

OASIS. The vendor provides a basic quantity of consumable supplies on a yearly basis. The FAA must provide anything beyond this basic allotment.

**OLD****Chapter 17. Facility Statistical Data, Reports, and Forms****OLD****17-1-1. FORM USAGE**

**a.** FSSs, as used herein, include and apply to combined facilities insofar as station functions are concerned. All domestic and IFSS must use FAA Form 7230-13 daily for recording in-flight, flight plan, and pilot briefing activity.

**REFERENCE-**

*FAA Order JO 7210.3, Para 17-5-2, Distribution and Amendment.*

**OLD****17-1-2. TOTAL FLIGHT SERVICES FORMULA**

Total Flight Services have historically been and continue to be used as a measurement of the overall activity of individual FSSs. Total Flight Services are based on the following formula:

**a.** FSS: Total Flight Services equal two times pilot briefs plus two times flight plans originated plus aircraft contacted.

**b.** IFSS: Total Flight Services equal two times pilot briefs plus two times flight plans originated plus two times aircraft contacted.

**c.** FSS/IFSS: Total Flight Services equal two times pilot briefs plus two times flight plans originated plus two times international aircraft contacted plus one times domestic aircraft contacted.

**NOTE-**

*Total Flight Services are not to be confused with the Flight Service Activity Factor, which is used for facility grade level determination and reclassification purposes. The present classification criteria and related formula for the Flight Service Activity Factor are contained in the GS-2152 position-classification standard issued by Civil Service Commission (CSC) (now Office of Personnel Management (OPM)) in June 1978.*

**OLD****17-2-1. AIRCRAFT CONTACTED****Title through a4**

**b.** One count must be taken for each flight contacted regardless of the number of contacts made with the aircraft during the same flight.

**NEW****Chapter 17. Facility Statistical Data, Reports, and Forms (Alaska Only)****NEW****17-1-1. FORM USAGE**

**a.** Flight Service Stations must use FAA Form 7230-13, or electronic equivalent, daily for recording in-flight, flight plan, and pilot briefing activity.

No Change

**NEW****17-1-2. TOTAL FLIGHT SERVICES FORMULA**

No Change

Total Flight Services equal two times pilot briefs plus two times flight plans originated plus aircraft contacted.

Delete

Delete

No Change

**NEW****17-2-1. AIRCRAFT CONTACTED**

No Change

No Change

Add

c. IFSSs must count aircraft contacted times two. IFSSs combined with other options must take the aircraft contacted times two only on the international portion of their operations.

**NOTE-**

For aircraft contacted purposes, a flight is considered to be in progress from the time taxiing is begun until it has landed and parked.

d**OLD****17-3-4. FLIGHT PLAN FORMS**

a. Use FAA Forms 7233-1 or 7233-4, as appropriate, to record flight plans copied by specialists.

b. Provide FAA Forms 7233-1 or 7233-4 and carbon for pilot use. Duplicating machine may be used in lieu of carbon.

**OLD****17-4-1. PILOT BRIEFING COUNT**Title through c ***NOTE***

Add

**OLD****17-5-1. COMPLETION OF MONTHLY ACTIVITY RECORD**

Title through c15

Add

**OLD****17-5-3. MESSAGE TRAFFIC NUMBER RECORD**

Use FAA Form 7233-6 or local substitute to record message traffic.

**NOTE-**

For aircraft contacted purposes, a flight is considered to be in progress from the time taxiing is begun until it has landed and parked.

Delete

Delete

Re-letter c

**NEW****17-3-4. FLIGHT PLAN FORMS**

Use FAA Forms 7233-1 (**DOD only**) or 7233-4, as appropriate, to record flight plans copied by specialists.

Delete

**NEW****17-4-1. PILOT BRIEFING COUNT**

No Change

**d. Instructions for recording pilot briefing count for FCFSS facilities are contained in contractor requirement documents.**

**NEW****17-5-1. COMPLETION OF MONTHLY ACTIVITY RECORD**

No Change

**d. Instructions for recording monthly activity for FCFSS facilities are contained in contractor requirement documents.**

**NEW**

Delete

Delete

**OLD****17-5-4. UNANNOUNCED MILITARY  
AIRCRAFT ARRIVALS**

The destination and departure tie-in stations must record on or attach to unannounced arrival messages all available related information and must coordinate with the local military bases for corrective action when necessary. These messages must be filed with the military daily traffic and unless a part of an incident, alleged violation, or accident, be retained for 15 days before disposal.

**NEW**

Delete

Delete

**OLD****20-1-6. TFR INFORMATION****Title through a**

**b.** National Airspace System (NAS) users or other interested parties should contact the nearest flight service station for TFR information. Additionally, you can find TFR information on automated briefings, Notice to Airmen (NOTAM) publications, and on the Internet at <http://www.faa.gov>.

Add

Add

Add

Add

Add

Add

**NEW****20-1-6. TFR INFORMATION****No Change**

**b.** National Airspace System (NAS) users or other interested parties should **review the latest available TFR information at any of the following sources:**

**1. TFR List: <http://tfr.faa.gov/tfr2/list.html>**

**2. TFR Graphical: [http://tfr.faa.gov/tfr\\_map\\_ims/html/index.html](http://tfr.faa.gov/tfr_map_ims/html/index.html)**

**3. Domestic Notices: [https://www.faa.gov/air\\_traffic/publications/domesticnotices/](https://www.faa.gov/air_traffic/publications/domesticnotices/)**

**4. International Notices: [https://www.faa.gov/air\\_traffic/publications/internationalnotices/](https://www.faa.gov/air_traffic/publications/internationalnotices/)**

**5. FAA NOTAM Search: <https://notams.aim.faa.gov/notamSearch/>**

**6. FCFSS website: <https://www.1800wxbrief.com/>**