

**CHANGE**

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

**Air Traffic Organization Policy**

**JO 7210.3BB  
CHG 1**

**Effective Date:**  
January 30, 2020

**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 7210.3BB, 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 Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.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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Vice President, Mission Support Services  
Air Traffic Organization

Date: 12/17/2019



# 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**  
**2-9-8. RUNWAY VISUAL VALUE (RVV)**  
**AND RUNWAY VISUAL RANGE (RVR)**  
**EQUIPMENT**

**10-3-4. RELAY OF RVV/RVR VALUES**

This change removes all references to Runway Visual Value (RVV) from this order.

**b. 1-2-4. ABBREVIATIONS**  
**21-4-7. UAS SPECIAL GOVERNMENTAL INTEREST (SGI) OPERATIONS**  
**21-5-4. UAS SGI ADDENDUM**  
**REQUEST PROCESS AND COORDINATION**

This change adds new paragraphs 21-4-7, UAS Special Government Interest (SGI) Operations, and 21-5-4 UAS SGI Addendum Request Process and Coordination. In addition, SGI is added to table 1-2-1 and a note is added to para 21-5-4, stating the prohibition of a LOA in lieu of a SGI addendum.

**c. 2-1-14. AIRCRAFT IDENTIFICATION PROBLEMS**

This change deletes Paragraph 2-1-14, subparagraph b, concerning facility reporting requirements for aircraft broadcasting duplicate ICAO address events within the same ADS-B Service Volume. This change also corrects the email address used for reporting civil aircraft call sign issues, updates the name of "Mission Support Services, Aeronautical Information Management" to "Mission Support Services, Aeronautical Information Services," and makes editorial changes as necessary. This change cancels and incorporates Notice JO 7210.918, Automatic Dependent Surveillance-Broadcast (ADS-B) Related Changes, which was effective January 2, 2020.

**d. 2-1-30. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES**  
**2-1-32. REPORTING UNAUTHORIZED, HAZARDOUS, OR SUSPICIOUS UAS ACTIVITIES**

This change is editorial in nature and does not change existing policy. Paragraph 2-1-32 is added pertaining to ATC facility reporting requirements of unauthorized, hazardous, or suspicious UAS activities. In addition, a reference to paragraph 2-1-2, Duty Priority, is added to paragraph 2-1-30.

**e. 3-3-5. BATTERY-POWERED TRANSCEIVERS**

This change to FAA Order JO 7210.3, Facility Operation and Administration, clarifies that weekly operational checks of transceivers used in contingency operations are for air traffic personnel to test the transmit/receive capability on both forms of power. This change also removes the note, as the information was confusing.

**f. 4-2-2. PILOT/CONTROLLER OUTREACH: OPERATION RAIN CHECK**

This change removes the requirement for ATMs to offer participation in Operation Rain Check to the Partnership for Safety Local Safety Council.

**g. 5-4-2. REQUESTS FOR DEVIATION FROM ADS-B OUT REQUIREMENTS**

This change adds a new paragraph addressing local facility responses to an operator requesting a long-term ATC authorization for aircraft not equipped with ADS-B Out. This change cancels and incorporates Notice JO 7210.918, Automatic Dependent Surveillance-Broadcast (ADS-B) Related Changes, which was effective January 2, 2020.

**h. 5-4-9. ADS-B OUT OFF OPERATIONS**

This change adds a new paragraph to FAA Order JO 7210.3 that provides guidance to facilities concerning FAA-authorized ADS-B Out OFF operations. This change cancels and incorporates Notice JO 7210.918, Automatic Dependent Surveillance-Broadcast (ADS-B) Related Changes, which was effective January 2, 2020.

**i. 10-3-1. DISSEMINATION OF WEATHER INFORMATION**

This change removes HIWAS from the Acronym List as this service is no longer provided by Flight Service. This change cancels and incorporates Notice JO 7210.917, Dissemination of Weather Information, which was effective January 8, 2020.

**j. 10-4-9. PRECISION RUNWAY MONITOR-SIMULTANEOUS OFFSET INSTRUMENT APPROACHES**

This change removes the requirement for high update rate surveillance when conducting SOIA operations, aligns the FMA requirements along those in other directives, and makes editorial changes throughout.

**k. 12-10-1. PROGRAM DESCRIPTION  
12-10-2. UAS FACILITY MAPS**

(UASFM)

**12-10-3. PART 101E NOTIFICATIONS****12-10-4. PART 107 ATC****AUTHORIZATIONS****12-10-5. UAS SERVICE SUPPLIER**

(USS)

**12-10-6. VOLUNTARY NOTIFICATION****12-10-7. REQUIRED NOTIFICATION****12-10-8. REQUIRED AUTHORIZATION****12-10-9. FURTHER COORDINATION**

This change modifies language in FAA Order 7210.3 to reflect the new FAA Reauthorization Act 2018. It introduces the new terminology and requirements for the limited recreational operators created by the passage of the new Act. This change cancels and incorporates Notice JO 7210.914, Low Altitude Authorization and Notification Capability – LAANC which was effective July 23, 2019.

**l. 18-4-1. TELEPHONE CONFERENCES**

This change adds a new requirement for TMOs to ensure ARTCC and TRACON TMUs participate in the daily “Plan, Execute, Review, Train, Improve” (PERTI) webinar.

**m. 18-5-12. DELAY REPORTING**

This change adds a new requirement of facilities to notify the overlying Air Route Traffic Control Center (ARTCC) of delays 45 minutes or greater.

**n. 18-6-14. TMIs OF 25 MIT OR GREATER**

This change adds a new coordination requirement between facilities and the ATCSCC regarding requests of 40 MIT or greater.

**o. 18-13-4. AIRPORT RESERVATION OFFICE**

This change deletes the e-CVRS interface phone number from the document.

**p. 20-6-4. AIRPORTS WITHIN AIRCRAFT HAZARD AREAS AND TRANSITIONAL HAZARD AREAS**

This change allows ATC services to be provided to aircraft at an airport in an AHA or THA once an LOA or a local SOP is developed that includes real-time start and end notifications for space launch and reentry operations. This change cancels and incorporates Notice JO 7210.915, Airports within Transitional Hazard Areas, which was effective October 15, 2019.

**q. Editorials**

Editorial changes include corrections in the Index, updating the names of lines of business, and updates to references.

**r. Entire Publication**

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

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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 7210.3AA, Facility Operation and Administration, dated October 12, 2017, 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.

Publication Schedule		
Basic or Change	Cutoff Date for Completion	Effective Date of Publication
JO 7210.3BB	2/28/19	8/15/19
Change 1	8/15/19	1/30/20
Change 2	1/30/20	7/16/20
Change 3	7/16/20	12/31/20
JO 7210.3CC	12/31/20	6/17/21

#### 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-8-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 1-1-1.)

#### **TBL 1-1-1 Military Headquarters**

<i>Branch</i>	<i>Address</i>
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.

### 1-1-12. DISTRIBUTION

This order is distributed to selected offices in Washington headquarters, Service Area offices,

Abbreviation	Meaning
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
IFSS .....	International flight service station
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
MEA .....	Minimum en route IFR altitude

Abbreviation	Meaning
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
NFDC .....	National Flight Data 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 Airmen
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
TEL-TWEB .....	Telephone-transcribed weather broadcast
TERPS .....	Terminal instrument procedures
TFMS .....	Traffic Flow Management System
TFR .....	Temporary flight restriction
TIBS .....	Terminal information broadcast system
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
TWEB .....	Transcribed weather broadcast
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

Abbreviation	Meaning
VCE .....	VSCS/Console Equipment
VEARS .....	VSCS Emergency Access Radio System
VFR .....	Visual flight rules
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



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 16-1-3, 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 150/5210-7C, 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 150/5210–7C, Airport 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 Para 10-5-3, Functional Use of Certified Tower Radar Displays.

c. An authorization for towers to provide separation services other than those prescribed in subparas a and b 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, subpara b2.*

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

**2.** Requests for ATC services to VFR aircraft operating within the designated area to enter positive controlled airspace 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 Area Directors of Terminal Operations are the focal point to review traffic patterns. Traffic patterns at airports without an operating control tower should be established in accordance with Advisory Circular, AC 90-66, Recommended Standard Traffic Patterns and Practices for Aeronautical Operations at Airports without Operating Control Towers.

b. 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, subparas 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.

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 Management. Summarize the ATCAAs or any amendments made to ATCAAs including additional changes, etc.

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

### **NOTE-**

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

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

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

### **NOTE-**

*ATCAA descriptive data will normally be submitted 9 weeks prior to the requested/required airspace effective date.*

## **2-1-28. 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, Paragraph 7-3-1, 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 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.

### **2-1-33. 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). Additionally, if this phone number is out of service, alternate back-up bridge phone numbers should be used to contact the DEN: 405-225-2444 or 844-663-9723 (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

## **2–1–34. 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

## 2–1–35. 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.

## 2–1–36. 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.

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 subparagraph 2-1-36a may be delegated as necessary. ■

mail (e-mail), etc.

2. Facilities can improve the process of GENOT distribution by reporting the distribution/reception of multiple copies of the same GENOT to their respective Air Traffic Service Area office or Flight Services Information Area Group office.

b. Determine if the contents of the GENOT is applicable to their facility.

c. Use the content to determine the priority of distribution.

d. Ensure information required to achieve operational mission is briefed prior to an employee performing their 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 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 and forward suggestions in *Microsoft Word* to the Policy Directorate via the electronic mailbox at 9-AJV-8-HQ-Correspondence, those proposals considered significant and national in scope.

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

Law enforcement information; e.g., aircraft identification, flight schedules, flight operations, procedures, aircraft lookouts, etc., is of great value to drug traffickers and others attempting to circumvent the law. Although law enforcement information is normally unclassified, it is considered to be inherently sensitive, of a confidential nature, and is to be handled on a "For Official Use Only" (FOUO)

basis. Facility air traffic managers 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, Para2-1-6, *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:**

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

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

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

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

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

**c. General Managers must:**

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

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

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

**d.** Safety/Quality Assurance Offices must ensure facility compliance with posting LOAs, SOPs and

FOs in the repository site in facility evaluation checklists.

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

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

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

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

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

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

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

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

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

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



## Section 9. Weather/Visibility

### 2-9-1. BACKUP/AUGMENTATION OF WEATHER OBSERVATIONS

a. Facilities where air traffic personnel provide backup/augmentation of automated weather observations, or take manual observations, must use FAAO 7900.5, Surface Weather Observing–METAR, as the basic source of guidance for completion of observations.

b. In an automated weather environment, elements of automated weather observations may be used for operational purposes (i.e., wind and altimeter).

c. Specialists responsible for providing backup/augmentation of automated weather observations, or manual observations, must be certified by the FAA.

#### REFERENCE–

FAA Order JO 7900.5, Appendix J, Aviation Weather Observer Certification Process.

### 2-9-2. RECEIPT AND DISSEMINATION OF WEATHER OBSERVATIONS

a. Facility air traffic managers must establish a means by which the receipt of weather observations are immediately known to facility personnel responsible for dissemination to other facility functions and that these functions are made aware of changes as they are posted. In addition, facility managers must establish procedures through the facility SOP that will ensure all positions of operation receive and acknowledge any change in reportable visibility value when the tower has the responsibility for visibility reporting. This may be accomplished by means of an alerting device, location of weather receiving equipment at positions so that any change of data is recognized, or any other means which may be best suited to the facility work environment.

b. To the extent possible, facility air traffic managers must establish procedures to acknowledge receipt of weather observations. Where possible, establish an agreement with the appropriate weather source to share the responsibility for ensuring the receipt of the observation. Automated Surface Observing System(s) (ASOS), Automated Weather Observing System(s) (AWOS), and Automatic

Weather Information System (AWIS) locations are not required to acknowledge receipt of observations.

c. The addition or deletion of a weather reporting location must be coordinated through the appropriate Service Area office, for forwarding to System Safety and Procedures. System Safety and Procedures must initiate the required actions for additions and/or deletions to the national data base. When adding new weather reporting locations, include a statement that:

1. An aviation requirement exists.
2. The observers are/have been certified by the FAA.
3. No other observation exists in the surface area, if applicable.
4. Identifies the hours that the data will be available if less than 24 hours, i.e., 0800Z–2300Z.
5. Identify what facility will be responsible for observation entry into the system.

d. AWOS towers with LAWRS certified controllers should disable the AWOS long–line communications capability during facility operating hours and use the AWOS data when representative of airport conditions to generate a manual METAR/SPECI observation. If AWOS is able to provide METAR/SPECI observations (for example, FAA AWOS–C) and allows augmentation and backup entries, the AWOS may be used the same as ASOS.

#### NOTE–

Ensure AWOS long–line communication is enabled when the facility closes.

### 2-9-3. LIMITED AVIATION WEATHER REPORTING STATION (LAWRS) HOURS OF OPERATION

a. Facility air traffic managers must submit to System Operations Airspace and Aeronautical Information Management office the hours of operation with the date that the facility commences participation in the LAWRS program and any changes thereafter in the hours of participation.

b. All part–time terminal facilities must include sign ON/OFF procedures for the automated weather observation system in the facility opening/closing procedures.

**NOTE–**

*This includes LAWRS and tower visibility facilities.*

c. All LAWRS facilities must ensure the automated weather observation system equipment is added to the facility watch checklist.

## 2–9–4. NONAVIATION WEATHER SERVICE

Facilities must not enter into agreements with any person or office, including fixed–base operators, to provide weather data for property protection purposes. The FAA must not be responsible for providing weather information unless it is directly related to the actual or intended operation of aircraft. Personnel must not encourage nor solicit non–aviation weather activity. Refer requests for this type of weather information to the nearest WSO.

## 2–9–5. NATIONAL WEATHER RECORDS CENTER

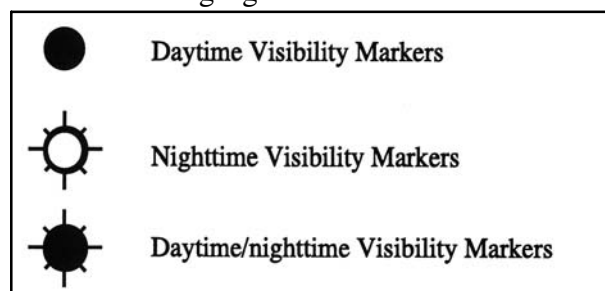
Refer requests for surface weather observations from non–aviation sources; e.g., requests from insurance companies for weather data relative to storm damage, to the National Weather Records Center, Environmental Data Service, Federal Building, Asheville, N.C., 28801.

## 2–9–6. VISIBILITY CHARTS

a. Where facilities provide backup/augmentation of automated weather observations, or manual observations, the facility air traffic manager will select a designee that will prepare and maintain visibility charts in accordance with the following:

1. Prepare a chart(s) or list(s) for daytime and nighttime visibility markers. At local discretion, visibility markers may be depicted on separate daytime and nighttime charts or on a daytime/nighttime combination chart. Panoramic photographs marked with distances and cardinal compass points may also be used.

2. Daytime/Nighttime combination charts must use the following legend for each marker:



3. Each marker used must be identified and its distance from the observation point noted. Include the height of the marker if it is for estimating heights of clouds and obscuring phenomena.

4. Mapping programs, aircraft/vehicles, GPS and/or surveying equipment are all valid methods to develop visibility charts.

b. The air traffic manager must conduct an annual review and approve the visibility charts, lists, or photos to ensure their accuracy.

## 2–9–7. SITING CRITERIA FOR VISUAL WEATHER OBSERVATIONS

To give a proper indication of weather conditions in the areas of aircraft approaches, landings, and takeoffs, the site from which visual weather observations are made should ideally be the Airport Reference Point (ARP). If this is not practical, the site must be as close to the ARP as practical. Except in unusual circumstances, it should be no more than 2 miles from that point. The site must also have an essentially unobstructed view of:

a. The most frequently used instrument runway and its final approach area; and

b. At least half of each quadrant of the natural horizon.

## 2–9–8. RUNWAY VISUAL RANGE (RVR) EQUIPMENT

a. FAA is responsible for checking and determining the operational status of RVR systems. Air traffic personnel must report all actual or suspect RVR malfunctions to Technical Operations Control Center personnel who are responsible for:

1. All checks and adjustments to the RVR systems.



2. Determining the operational usability of all portions of the systems in accordance with applicable performance criteria in FAA Order JO 6560.8, Maintenance of Runway Visual Range (RVR) Equipment, or other appropriate RVR equipment instruction books.

3. Reporting immediately to authorized visibility observing personnel obvious error between information derived from the system and actual observed visibility conditions at the transmissometer site.

**NOTE—**

*Technical Operations personnel are not visibility observers. However, obvious errors or differences which are easily apparent to them will be reported to the visibility observer and the instrument-derived information should not be used.*

b. Air traffic personnel must also:

1. Verify accuracy with other displays in the facility when any meter and/or readout malfunction is suspected. Upon determining that at least one display is operating properly, accomplish internal coordination to disseminate the current correct reading to all operating positions needing the information.

2. Notify the local weather observing facility immediately when malfunctioning of all airport traffic control tower (ATCT) and terminal radar approach control (TRACON) displays for the runway of concern is indicated or suspected. Upon verification of malfunction, request the weather observing facility to furnish RVR values for that runway. During such conditions, weather observing personnel will relay RVR information to tower personnel as long as equipment at the weather observing facility is known to be operating correctly and when the high intensity runway lights (HIRL) are

on setting 3 or higher. RVR values provided during the malfunction will be based on a setting of 5 unless the control tower has specifically requested data for a lower light setting. The weather observing facility will provide the RVR at the time of notification that the traffic control facility readouts are inoperative. It will also provide notification as soon as possible when the values decrease to become equal to or less than, or increase to equal to or exceed:

(a) RVR 2,400 feet.

(b) The lowest authorized landing minimum for the runway of concern.

## 2-9-9. SPECIFIC AREA MESSAGE ENCODING (SAME) WEATHER RADIOS

### TERMINAL

SAME Radios must only be used to provide weather information for occupants of Terminal facilities. This equipment is not certified for the purpose of providing weather or any other aviation-related information and therefore must not be used for any aviation-related purpose.

a. SAME Radios must not be used in lieu of pre-existing emergency evacuation procedures or FAA certified sources of aviation related weather data.

b. SAME Radios must only be programmed for the specific county/territory of the facility.

c. The following must be affixed to the SAME Weather Radio so as to be visible: "This equipment is not certified for the purpose of providing weather or any other aviation-related information and therefore must not be used for any aviation-related purpose."



## Section 3. Communications Procedures

### 3-3-1. SERVICE “F” COMMUNICATIONS

Facility air traffic managers must establish procedures to provide interim communications in the event that local or long-line standard Service “F” fail. These must include the use of telephone conference circuits and the use of airline or other facilities.

### 3-3-2. TELEPHONE COMMUNICATIONS

a. Answer public access telephones by stating the facility’s name and type. The employee may state his/her name at his/her discretion. If, for any reason, a caller specifically requests identification, the employee should provide his/her assigned operating initials in lieu of the actual name. Contract facilities must answer public access lines by stating the name of the service provider and type.

#### **EXAMPLE–**

*ARTCC: (The facility’s name) Center; for example, “Washington Center.”*

*FSS: (The facility’s name) Flight Service; for example, “Juneau Flight Service” or “(Service Provider Name) Flight Service.”*

*ATCT: (The facility’s name) Tower; for example, “Atlanta Tower.”*

*Approach Control: (The facility’s name) Approach Control; for example, “Dulles Approach Control.”*

b. Answer local airport, private exchange (PX), or interdepartmental system type telephones as outlined above, except omit the location name; e.g., Center, Tower, Flight Service, etc.

c. Where the public access telephone is recorded, a beeper tone is not required. In place of the “beep” tone, the FCC has substituted a mandatory requirement that persons to be recorded must be given notice that they are to be recorded and give consent. This notice is given to the public through an entry in the Aeronautical Information Manual (AIM). Consent to the record is assumed by the individual when placing the call to an operational facility.

d. When equipment capabilities exist, every effort should be made to conduct conversations regarding ATC services, aircraft accidents, incidents, and contingency operations on a recorded line.

e. Recorded telephone lines must be identified in the facility SOP.

### 3-3-3. MONITORING FREQUENCIES

a. Frequencies allocated to a facility must be continuously monitored except:

1. ARTCCs need not monitor 121.5 and 243.0 MHz if other ATC facilities monitor those frequencies in a given area.

2. FSSs equipped with ICSS equipment may reconfigure the ICSS to allow the temporary selection, muting, or rerouting of 121.5 and 243.0 MHz during the period of an interfering signal; e.g., continuous emergency locator transmitter (ELT), stuck mike, etc.

b. Facilities must establish procedures to ensure that frequencies used on a shared basis; e.g., single frequency approach operations, are continuously monitored by one of the positions of operation.

### 3-3-4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHz

a. Air traffic facilities must have transmit and receive capability on emergency frequencies 121.5 and 243.0 MHz as necessary to meet emergency frequency network requirements.

b. At locations having more than one type of facility, such as a FSS and a tower, or a FSS, a tower, and an ARTCC, a common transmitter and receiver may be shared where practicable. Where this is done, the transmitter must be equipped with a lockout device to avoid inadvertent interference between facilities.

c. When facilities are in proximity and no derogation of services will result, transmit/receive capability should not be provided for each facility. The following requirements must be maintained:

1. Geographical area coverage must not be derogated.

2. Facilities without emergency frequency capability must have appropriate landlines for rapid relay of emergency information.

d. The two emergency channels must not be terminated on the same key in the transmitter–receiver selector panels. Neither emergency frequency must be terminated with any other frequency.

e. To preclude inadvertent use of these frequencies, a mechanical or other appropriate device must be provided which will require deliberate removal or bypass before any emergency frequency transmit key can be moved to the locked–operate position.

f. UHF emergency frequency 243.0 MHz is installed in military aircraft using an override arrangement. As a result, transmissions on this frequency are received by all military aircraft within the transmitter’s area of coverage. Unnecessary emissions on this frequency derogate communications on ATC frequencies and may interfere with valid emergency communications. Reduce transmissions on 243.0 MHz to the absolute minimum consistent with safety.

g. As a minimum, conduct two–way, ground–to–air checks during low activity periods:

1. Once a week.

2. Following equipment repairs.

3. Following Technical Operations maintenance checks.

h. Control facilities should limit broadcasts on 243.0 MHz to the facility in the area of desired coverage and must ensure that broadcasts are not continued unnecessarily.

### 3–3–5. BATTERY–POWERED TRANSCEIVERS

Facilities equipped with battery–powered transceivers must ensure they are maintained in a state of readiness. Transceivers identified for use during a Contingency Plan Event must be checked weekly for receive and transmit capability on both battery and commercial power. These checks facilitate controller familiarization.

#### REFERENCE–

FAA Order JO 7210.3, Subpara 4–6–5g, Preparation of FAA Form 7230–4.

### 3–3–6. FACILITY STATUS REPORT

Facility air traffic managers must notify System Operations and Safety by message, attention

Manager of System Safety and Procedures, with an information copy to the appropriate Service Area office, of changes in the operational status of communication facilities not covered by FAAO 7900.2, Reporting of Electronic Navigation Aids and Communication Facilities Data to the NFDC. The following data must be reported (include the RIS AT 7230–12 in the text):

- a. The date and time FAA assumes operation of or decommissions an operations center, message center, data switching center, domestic or international aeronautical fixed telecommunication network (AFTN) “data communication circuit”, or international voice circuit.

- b. Change in the hours of operation of any of the above and the effective date.

- c. Changes required in weather schedule publications and communications systems drawings.

### 3–3–7. TESTING EMERGENCY LOCATOR TRANSMITTERS

- a. The frequencies 121.6, 121.65, 121.7, 121.75, 121.8, 121.85, and 121.9 MHz are authorized to ELT test stations and for use in ELT exercises by the Air Force, Coast Guard, and other search and rescue organizations. Coordination with regional frequency management offices must be effected prior to activating the transmitter. Non–Federal assignments must be obtained through the FCC.

- b. Airborne ELT tests must not be authorized.

- c. Aircraft operational testing of an ELT is authorized on 121.5 MHz and 243.0 MHz as follows:

1. Tests should be no longer than three audio sweeps.

2. If the antenna is removable, a dummy load should be substituted during test procedures.

3. Tests must only be conducted the first 5 minutes of any hour.

- d. Normally, there will be no interference on 121.5 MHz or 243.0 MHz as testing will be conducted in a screened or shielded room or test enclosure that will hold the self–contained ELT unit with the antenna fully extended. If interference is noted, it must be brought to the attention of the repair station operator for corrective action. If the repair station operator does not correct the fault and the interference continues, make a verbal report to the appropriate FSDO.

## Section 5. Navigational Aids

### 3-5-1. NAVAID MONITORING

When a facility is assigned responsibility for monitoring NAVAIDs, the air traffic manager must issue monitoring instructions in a facility directive. Notification procedures must be coordinated with the appropriate sector manager.

**NOTE—**

*Monitoring assignments are made by air traffic offices in the Service Centers.*

**a. VOR/VORTAC:**

1. Aurally check the identification at the beginning of each watch.

**NOTE—**

*Upon commissioning of 2nd generation (FA-9996) VORs, aural monitoring is not required.*

2. Record the check in accordance with subparagraph 4-6-5g, Preparation of FAA Form 7230-4.

3. If a monitor Category 2 exists:

(a) Take appropriate action as indicated in FAA Order JO 7110.65, Air Traffic Control, Paragraph 2-1-10, NAVAID Malfunctions.

(b) Notify the ARTCC.

**NOTE—**

1. VORs, VORTACs, and TACANs have an automatic course alignment and signal monitor (ACM). This monitor is usually connected to a remote alarm. An automatic transfer and shutdown unit (ATU) is installed as part of the ACM. When the ACM detects a malfunction, the ATU switches the range to a standby transmitter. If the standby transmitter does not work properly, the ATU will shut down the facility.

2. Monitoring of VOR test signals (VOT) is accomplished by a light or a buzzer monitor and is of local concern only.

3. VOR and VORTAC monitor categories:

a. Category 1: Alarm feature and identification heard at the control point.

b. Category 2: Monitor equipment failure and identification not heard at the control point, but aircraft reports indicate that the facility is operating normally.

c. Not constantly monitored by other than ACM and ATU.

**b. TACAN (joint-use airports):**

1. Aurally check the identification at the beginning of each watch.

2. Immediately notify the responsible military authority when an alarm is received.

3. Consider the aid inoperative when the alarm cannot be silenced and the identification cannot be heard on the aural monitor.

**NOTE—**

*The military authority will issue NOTAMs for TACANs.*

**c. DME (to be monitored by the same facility that monitors the associated VOR, VORTAC, or ILS):**

1. Press the VOR/DME control oscillator level to the “Facility On” position at the beginning of each watch.

2. Record the check in accordance with subparagraph 4-6-5h, Preparation of FAA Form 7230-4.

**d. L/MF aids (to be monitored on a continuous basis):**

1. Check the identification at the beginning of each watch.

2. Record the check in accordance with subparagraph 4-6-5h, Preparation of FAA Form 7230-4.

**e. NDB (class MH, class H, and class HH):**

1. Monitor continuously by automatic means the beacons used as IFR aids.

2. Check the operation at least once each hour if an automatic alarm is not available.

**f. ILS**

1. Check the ILS monitor panel at the beginning of each watch and record the system status in accordance with subparagraph 4-6-5h, Preparation of FAA Form 7230-4.

2. Apply the procedures described in Paragraph 3-5-2, System Component Malfunctions, when there are indications that a component has failed.

3. If you suspect that the indication is caused by a control line or a control station monitor failure rather than a malfunction of the component itself,

take appropriate action as indicated in FAA Order JO 7110.65, Paragraph 2-1-10, NAVAID Malfunctions. If a malfunction is confirmed, discontinue use of the component involved.

**NOTE-**

*Not all ILS components are provided with remote monitor and control lines (on/off capability). If the failure indication is caused by a control line or a control station monitor failure, the Technical Operations technician must advise if that component will be restored to operation and the monitor status.*

**g. Compass locators:**

1. Monitor continuously by automatic means.
2. Check the operation at least once each hour if an automatic alarm is not available.
3. If the provisions of subparas 1 or 2 above cannot be met, the compass locator may be considered monitored if it is equipped with an automatic monitor and shutdown feature at the site. In this case responsibility for monitoring must not be assigned to the air traffic facility.

### **3-5-2. SYSTEM COMPONENT MALFUNCTIONS**

Take the following action when the alarm signal or a report indicates an air traffic system component malfunction:

- a.** Try to restore the aid to normal operation.
- b.** If unable to restore it, discontinue its use and:
  1. Notify the appropriate IFR control facility/sector.
  2. Notify the appropriate FSS as necessary.

3. Notify Technical Operations personnel in accordance with FAAO JO 6030.31, National Airspace System Failure Response, and locally developed procedures.

4. Issue any necessary NOTAMs, and take other NOTAM related actions as appropriate.

**REFERENCE-**

FAA Order JO 7210.3, Para 3-5-1, NAVAID Monitoring.  
FAA Order 7930.2, Para 4-2-1, NOTAM Composition.

**NOTE-**

*When Technical Operations personnel silence the monitoring system of any NAVAID, they will assume responsibility for the monitoring function.*

### **3-5-3. PROCESSING GPS ANOMALY REPORTS**

Forward all information gathered as per FAA Order JO 7110.65, Air Traffic Control, 2-1-10, Paragraph b., NAVAID MALFUNCTIONS, through the TMU to the ATCSCC, and the appropriate Operations Control Center (OCC) or Service Operations Center (SOC).

**NOTE-**

*The WAAS Operations-East Desk at the ATCSCC in Warrenton, Virginia is the national focal point for reporting and response coordination for all GPS anomalies.*

### **3-5-4. ORIGINATING NOTAMs CONCERNING NAVAIDs**

Air traffic facilities having responsibility for monitoring NAVAIDs must originate NOTAMs regarding their status unless otherwise directed by the Service Area office.

## Section 7. Video Maps

### 3-7-1. TOLERANCE FOR RADAR FIX ACCURACY

Careful attention must be given during commissioning flight checks of a radar to the accuracy of digital maps, video map plates, or overlays to ensure that the plate or overlay markings meet specified requirements relative to permanent targets. In actual practice an aircraft's displayed position can be slightly in error with respect to its geographic position and still meet the requirements of FAA Order 8200.1, United States Standard Flight Inspection Manual.

### 3-7-2. RADAR MAPPING STANDARDS

The minimum radar mapping capability required for commissioning radar services is one of the following:

- a. Dual video mapper.
- b. Adequate map overlay.
- c. Single video mapper plus a map overlay.
- d. AN/GPA-70 at USAF installations.
- e. AN/GPA-91 at Navy installations.
- f. Computer-generated displays.

#### NOTE-

*Grease pencil markings, plastic tape, compass rose grid lines, range marks, or other innovations must not be used in lieu of an adequate digital map, map overlay, or video map.*

### 3-7-3. DISPLAY MAP DATA

To reduce scope clutter and increase operational efficiency, limit data on display maps to the following (except for subparagraph o, facility air traffic managers may delete items not required):

- a. Airports/heliports.

#### NOTE-

*Mission Support Services, Aeronautical Information Services, AJV-A2 will verify the accuracy of video maps they produce to ensure the video maps depict only operational airports as defined by the Office of Airport Safety and Standards, AAS-1. Facilities will be notified by AJV-A2 that new radar video maps (RVMs) will be sent when a depicted airport is no longer operational.*

- b. Runway centerline extension and/or final approach course.

#### REFERENCE-

*FAA Order JO 7110.65, Para 5-9-1, Vectors to Final Approach Course.*

- c. Hospital emergency landing areas.
- d. NAVAIDs and fixes.
- e. Reporting points.
- f. Airway/route centerlines.
- g. Boundaries (control, special use areas, terminal buffer areas, outer fix holding pattern airspace areas, no transgression zones, etc.).
- h. Handoff points.
- i. Special use tracks (scramble, recovery, Instrument Departures, etc.).
- j. Obstructions.
- k. Prominent geographic features (islands, mountains, etc.).
- l. Map alignment indicators.
- m. Range accuracy marks.
- n. Minimum vectoring altitudes in hundreds of feet; e.g., 23-2,300 ft., 100-10,000 ft.
- o. Airports immediately outside your area of jurisdiction that are:
  - 1. Within airspace used to receive radar handoffs; and
  - 2. Depicted by the facility having jurisdiction over that airspace.

- p. Virtual intersection markings for non-intersecting converging runways if the flight paths intersect within 1NM beyond the departure end of both runways.

#### NOTE-

*The intent of subparagraph o is to assist controllers in making emergency airport recommendations when inflight emergencies occur near facility boundaries. There is no intent to establish criteria for airport depiction. However, insofar as facilities having jurisdiction depict airports, then those same airports must be depicted on the adjacent facility's video map.*

#### REFERENCE-

*FAA Order JO 7110.65, Para 10-2-15, Emergency Airport Recommendation.*

**3-7-4. INTENSITY**

Set the intensity of the video map and the range marks on the CTRD equipment at the minimum intensity that will provide the controller with the necessary information. Supervisory personnel must ensure that a usable intensity is maintained.

**3-7-5. COMMON REFERENCE POINTS**

Facility air traffic managers must ensure the

adequacy of common reference points on radar maps where such points are used in providing air traffic control services; e.g., handoff points, etc., between adjacent facilities or between sectors within the facilities using different radar systems. Whenever possible, simultaneous flight checks should be conducted of these radar systems. FAA Order 8200.1, United States Standard Flight Inspection Manual, must be used in determining the appropriate tolerances.



## Section 8. Other Displays

### 3-8-1. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) FOR FACILITIES PROVIDING TERMINAL APPROACH CONTROL SERVICES

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

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

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

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

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

c. Where the system is utilizing FUSION mode, develop an MVAC that provides:

1. Three-mile separation minima or more from obstacles, except when applying the provision in paragraph 3-8-1c2. The MVAC must depict obstacle clearances, outward to the lateral limits of the associated approach control airspace and an appropriate buffer outside the lateral approach control airspace boundaries. As a minimum, this may be accomplished by using the existing single-sensor MVAC for the predominant radar sensor; and

2. Five-mile separation minima from obstacles for use whenever the FUSION system cannot provide 3-mile separation due to degraded status or system limitations.

d. At locations adding FUSION, provided the facility uses existing MVA charts with 3-mile buffers and an MVAC with 5-mile buffers, additional charts do not need to be developed to support FUSION.

#### NOTE-

Mission Support Services, Aeronautical Information Services, Aeronautical Charting, Radar Video Mapping Team should be contacted if assistance is required. (See FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS) Chapter 10.)

#### REFERENCE-

FAA Order JO 7110.65, Para 5-5-4, Minima.

### 3-8-2. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) PREPARATION (TERMINAL/MEARTS)

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

a. MVACs must be developed and maintained using the Web-based Sector Design and Analysis Tool (Web-SDAT). Facility Managers may request assistance in the development and maintenance of their MVAC or request SDAT user support by soliciting the Program Management Office, Aeronautical Services Group. MVACs developed in SDAT properly apply obstruction clearance criteria required by FAA Order 8260.3. SDAT completes FAA Form 7210-9 and automatically creates and sends the necessary data files to Mission Support Services, Radar Video Mapping Team upon certification for subsequent radar video map creation. Facility correspondence to the Radar Video Mapping Team regarding MVACs and video maps must be accomplished via email to 9-AJV-HQ-ATCPRODUCTS.

#### NOTE-

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

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

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

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

e. Facility requests for reduced required obstruction clearance (ROC) in an area designated as

mountainous in accordance with 14 CFR, Part 95, Subpart B, must conform to the following procedures:

**1.** Designated mountainous terrain must be evaluated for precipitous terrain characteristics and the associated negative effects. Facility managers must use FAA Order 8260.3, paragraph 15–2–1, as a guide when considering ROC reductions in designated mountainous areas. ROC reductions are not authorized where negative effects of precipitous terrain are documented or known having followed the process contained in subparas e2 and 3 below. ROC reductions within designated mountainous areas are only authorized by complying with at least one of the following criteria:

**REFERENCE–**

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

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

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

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

**REFERENCE–**

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

**3.** The facility MVAC package must include a detailed account of the steps taken by the facility to determine if the sector will qualify for taking a ROC reduction in the sector. This data will be reviewed by the Service Center Operations Support Group (OSG)

and the Radar Video Mapping Team personnel for ROC reduction approval. Service Center Operations Support personnel must be the approving authority for ROC reduction criteria compliance with paragraph e1(a) and (b) above. Previously approved reductions in ROC justifications must be resubmitted for approval during a facility's recurring certification process.

**NOTE–**

*Should a ROC reduction request be denied by Service Center Operations Support personnel, the manager may appeal the decision to the appropriate Service Area Director of Air Traffic Operations.*

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

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

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

**7.** ROC reductions should only be requested when there is a demonstrated operational need.

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

**g.** Resultant MVAs may be rounded down to the nearest 100-foot increment (those that are xx49 feet or less), except in the following cases:

**1.** Any locations outside of the Contiguous United States.

**2.** Where any part of an MVA Sector is more than 65 NM from the issued altimeter source.

**3.** When all of the following conditions are applicable:

**(a)** the MVA Sector is within designated mountainous areas by 14 CFR Part 95,

**(b)** the terrain is deemed precipitous by facility Air Traffic Management,

(c) the previous 5 year average low temperature at the primary airport is documented to be less than the temperature shown in TBL 3–8–1 for the amount of ROC reduction requested. Retain temperature documentation locally with approved 7210-9. Use TBL 3–8–1 to determine the extent of mountainous terrain reduction permitted if rounding down, based on the average low temperature. Comply with the following process to determine the average low temperature.

(1) Go to the National Climatic Data Center web site at [www.NCDC.noaa.gov](http://www.NCDC.noaa.gov).

(2) Click on “Data Access” link on blue bar.

(3) Click on “Quick Links”.

(4) Click on “Global Historical Climatology Network” link.

(5) Click on “Global Summary of the Year”.

(6) Accept the default date, select “Stations” in the search for field, then enter the station representing the primary airport. Then click on search.

(7) Click on the airport name. When the page opens, scroll down to “View Station Data”. Select the year interested in. Then view data.

(8) A report will appear, then go to the second page. Document the EMNT value. Select each relevant year and document the EMNT for that year. Then calculate the 5–year average.

**TBL 3–8–1**  
**ROC Reduction/Temperature Table**

Requested ROC Reduction	Minimum Average Low Temperature
100'	-40°C/-40°F
200'	-35°C/-31°F
300'	-30°C/-22°F
400'	-25°C/-13°F
500'	-20°C/-4°F
600'	-15°C/5°F
700'	-10°C/14°F
800'	-5°C/23°F
900'	0°C/32°F
1000'	7°C/45°F(2°C/36°F when MVA sector is within 35 NM of issued altimeter)

h. Managers requesting to waive criteria contained in FAA Order 8260.3, must submit FAA Form 8260-1, Flight Procedures/Standards Waiver in conjunction with the MVA project. This waiver form will contain the criteria requested to be waived, with the operational need fully explained, and examples of how the facility will achieve an equivalent level of safety, if approved. The package will be sent to the Radar Video Mapping Team through the Service Center OSG. Upon completion of the Radar Video Mapping Team review, the package will be forwarded to the Flight Procedure Implementation and Oversight Branch. For the Flight Standards Waiver process, facility managers do not need to complete a Safety Management System evaluation. An electronic copy of the completed waiver package must be sent to Operations Headquarters Directorate, AJT-2, at 9–AJT–HQ–Correspondence.

i. MVAs must not be below the floor of controlled airspace and should provide a 300–ft buffer above the floor of controlled airspace. In some cases, this application will result in an exceptionally high MVA (for example, in areas where the floor of controlled airspace is 14,500 MSL). When operationally required to vector aircraft in underlying Class G (uncontrolled) airspace, 2 MVAs may be established. The primary MVA must be based on obstruction clearance and the floor of controlled airspace. A second, lower MVA that provides obstruction clearance only may be established. The obstruction clearance MVA must be uniquely identified; for example, by an asterisk (\*). Do not consider buffer areas for controlled airspace evaluations.

j. If new charts prepared using SDAT create a significant impact on a facility’s operation, the impact must be coordinated with Operations Headquarters Directorate, AJT-2, for joint coordination with System Operations.

**NOTE–**

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

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

Sector B, B1, and B2 are to be merged in SDAT shape files for RVM presentation only.

**l.** Air traffic managers must submit the request for MVACs to the appropriate Service Center OSG for review. The Service Center OSG must then forward the requested MVAC to the Radar Video Mapping Team for processing.

**m.** Each request must indicate the MVAC was accomplished in Web-SDAT, stored in the Web-SDAT database and when necessary, include a statement regarding the issued altimeter settings being within 65 NM of a rounded down sector and/or provides the 5-year average cold temperature.

**n.** Each request must include the SDAT generated Form 7210-9 with the manager's signature and point of contact at the submitting facility. Form 7210-9 must also be an electronic copy with the manager's signature, and imported into the MVA project file. When applicable, each Form 7210-9 must include explanations/justifications for ROC reduction requests. The MVA request with the 7210-9 will be electronically forwarded to the OSG. When the capability of electronic signatures is developed within SDAT, Form 7210-9 may be transmitted electronically between the facility, Service Center, and Radar Video Mapping Team in lieu of the paper process. SDAT will automatically store the approved MVAC package in the National Airspace System Resource (NASR).

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

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

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

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

### **3-8-3. ALTITUDE ASSIGNMENTS TO S/VFR AND VFR AIRCRAFT**

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

#### **REFERENCE-**

FAA Order JO 7110.65, Para 7-5-4, Altitude Assignment.

FAA Order JO 7110.65, Para 7-8-5, Altitude Assignments.

### **3-8-4. EMERGENCY OBSTRUCTION VIDEO MAP (EOVM)**

**a.** An EOVM must be established at all terminal radar facilities that have designated mountainous areas as defined in 14 CFR Part 95, Subpart B, within their delegated area of control and an available channel in their video mappers. This map is intended to facilitate advisory service to an aircraft in an emergency situation in the event an appropriate terrain/obstacle clearance minimum altitude cannot be maintained. (See FIG 3-8-1.)

#### **NOTE-**

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

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

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

#### **d. EOVM Design:**

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

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

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

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

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

**NOTE–**

*Mission Support Services, Aeronautical Information Services, AJV–A2 will verify the accuracy of video maps they produce to ensure the video maps depict only operational airports as defined by the Office of Airport Safety and Standards, AAS–1. Facilities will be notified by AJV–A2 that a new EOVM will be sent when a depicted airport is no longer operational.*

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

(f) Other information deemed essential by the facility.

**NOTE–**

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

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

**NOTE–**

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

**EXAMPLE–**

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

e. EOVM Production: The initial preparation and procurement of the EOVM must be accomplished in accordance with FAA Order 7910.1, Aeronautical Video Map Program.

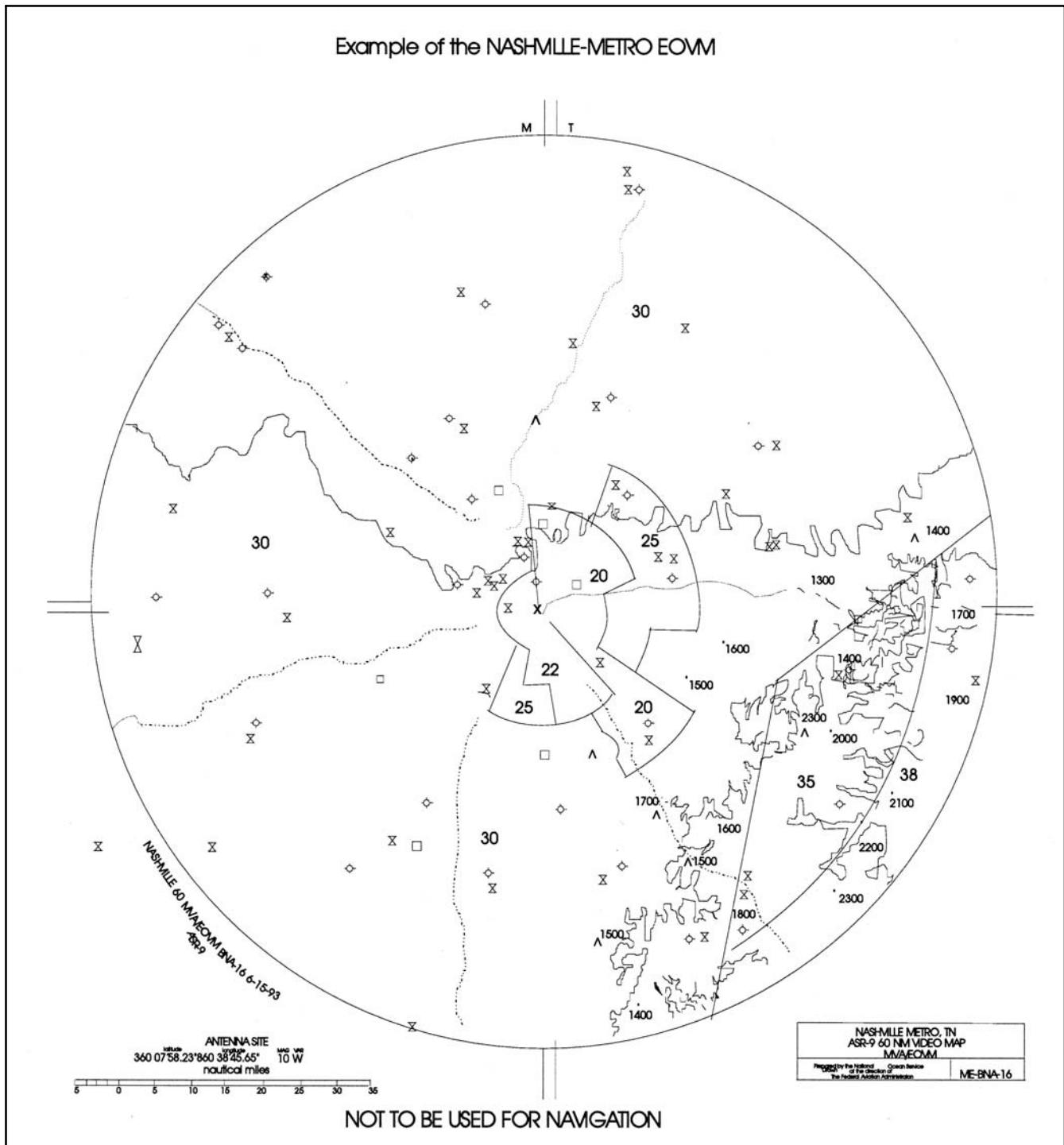
f. EOVM Verification: The initial and subsequent EOVM procurement package must be checked for adequacy and then coordinated with AJV–A2 to verify the accuracy of its information. At least once every 2 years, the EOVM must be reviewed for adequacy and coordinated with AJV–A2 for accuracy.

g. Facilities will receive a new EOVM from AJV–A2, regardless of whether changes were made or requested. ATMs must revise charts immediately when changes affecting the EOVM occur.

**NOTE–**

*AJV–A2's review cycle may not be the same as a facility's 2-year review cycle. In an effort to reduce duplication of work, ATMs should align their 2-year review dates with that of AJV–A2's review.*

FIG 3-8-1  
EOVM



### 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, Instrument Flight Procedures 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 Instrument Flight Procedures 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 Instrument Flight Procedures Group provide them with a graphic depiction of any departure penetrations in addition to completing the following steps:

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

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

2. If the location is not listed, query the NFDC web site at [http://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.*

3. 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-9 with Mode S beacon system.

(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 Area 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 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.



## Section 2. User Coordination/Conferences/Publicity

### 4-2-1. LOCAL CONFERENCES

a. Facility air traffic managers must call local conferences, as often as important local problems warrant, for discussing and clarifying facility operational matters. Use discretion before making any policy commitments.

1. Following these conferences, take appropriate action within your jurisdiction.

2. Send two copies of the minutes, or a summary, of each local conference to the appropriate Service Area office and one to each conference member.

b. If a general conference is needed to discuss problems and subjects of a broader nature than those suitable for a local conference, forward such recommendation to the appropriate Service Area office.

### 4-2-2. PILOT/CONTROLLER OUTREACH: OPERATION RAIN CHECK

The need to expand pilot and controller operational perspectives is very important; therefore, air traffic facilities should maintain effective pilot/controller outreach efforts, such as Operation Rain Check. Conducting seminars, briefings and familiarization experiences remain a great way to enhance pilot awareness of National Airspace System (NAS) functions, safety, and airspace procedures. Emphasis should be placed on operations within Class B, Class C, Class D and Terminal Radar Service Area (TRSA) airspace and, where applicable, on runway safety.

a. Operation Rain Check must.

1. Be performed as an additional duty and must not adversely impact facility resources.

2. Be conducted in an atmosphere that fosters mutual understanding, cooperation and a free exchange of information.

3. Demonstrate a desire to help pilots make use of FAA services, and reflect a spirit of service to NAS operators, while also benefitting controllers.

b. Important success factors to consider for Operation Rain Check:

1. Facility access and security. Use good judgment and proper security measures while planning, setting up and conducting local programs.

#### REFERENCE-

<http://www.faa.gov>

FAA Advisory AC 61-91J WINGS – Pilot Proficiency Program

FAA Order 8900.1. Flight Standards Information Management System, Volume 15, FAAS Team Policies and Procedures (<http://fsims.faa.gov/>)

FAA Order JO 7200.21, Partnership for Safety Program

2. Continuous and extensive publicity may be vital to a successful program. FAA Public Affairs may provide guidance on local media relations activities. Also, consider collaborating program agendas and events with the FAA WINGS program representatives.

3. Distribute program announcements and/or information to airport authorities, flight schools, fixed base operators, military airfield managers, and neighboring facilities, including Flight Standards District Offices (FSDO) and Airport District Offices (ADOs).

4. Consider presenting Letters of Appreciation to key program participants.

5. Facility Managers should:

(a) Determine what program materials, resources and other safety organizations would add value to implementing local Operation Rain Check programs.

#### NOTE-

*At locations where more than one air traffic facility exists, consider cooperative efforts.*

(b) Ensure locally adopted indoctrination materials comply with Privacy Act stipulations.

(c) Offer participation to Runway Safety Action Teams, FSDOs, and Airport Authorities.

(d) Be emphatic about Runway Safety and should include the following on the agenda:

(1) Runway incursion/excursion prevention.

(2) Airport signage and markings.

(3) Local runway safety related issues.

(4) Pilot/controller communications and read backs.

**NOTE–**

**1.** *Runway Safety Action Team meetings are required at all towered airports (FAA Order 7050.1, Chapter 4) and may be included to provide a positive venue for controllers, pilots and airport personnel to address surface safety.*

**2.** *Additional runway safety information is available through FAA National and Service Area Runway Safety Offices and Runway Safety Program Managers.*

- c. Facility sponsored pilot/controller forums.

#### **4-2-3. PUBLISHED ITEMS**

Items of publicity, either commendable or critical of FAA facilities, should be forwarded to the Service Area office. This includes newspaper clippings, magazine articles, photographs, or copies of letters.

#### **4-2-4. COORDINATION OF ATC PROCEDURES**

**a.** Coordination must be carried out with the appropriate users prior to implementing or changing procedures which may have a significant effect on them or flight information publications. *Users* means the operators of aircraft; organizations representing aircraft owners, operators, or pilots; individuals; the DOD; aviation authorities; or other government agencies concerned with the safe, efficient operation of aircraft in the NAS.

**b.** Procedures which will have a significant effect on the users will be coordinated with them by means

of correspondence, individual contacts, or a presentation at a meeting for the purpose of soliciting individual comments. When deemed appropriate, the advice and viewpoint of individual users will be obtained prior to the development of a proposed change. When safety is not a factor, a minimum of 45 days should be afforded those responding to a request for comments.

**c.** No joint user meeting will be conducted for the purpose of seeking user consensus or agreement on an issue. Coordination does not mean or imply that unanimity of opinion must be reached nor does it mean that user concurrence is required.

**d.** Interfacility coordination must be carried out, as appropriate, prior to coordination with the users. In addition, all other concerned FAA facilities and offices must be informed prior to implementing these changes.

**e.** The final decision on whether a change is adopted as proposed, changed in light of the individual replies received, or not adopted rests with the initiating office and will be based on an evaluation of all pertinent factors. If significant objections to a change are received, advise the Service Area office which will inform the Manager of Airspace and Rules, if deemed appropriate.

**f.** When a change is adopted, users will be afforded sufficient time to prepare for the change prior to its implementation. If a proposed change is not adopted, an explanation of the decision will be forwarded to the users.

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>
Air Traffic Manager, (Name) ARTCC
Commander, (Name) Air Division
(Title of other appropriate authority)

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

**a.** Radar identification, altitude, and en route fourth line control information approval may be transferred via full data blocks without using point-out procedures or verbal coordination. Air traffic managers wishing to authorize the use of the AIT process 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*

## Section 3. DOE and Other Aircraft

### 5-3-1. DEPARTMENT OF ENERGY (DOE) FLIGHTS

DOE contracts for civil pilots to operate public aircraft to transport radioactive and/or high explosive materials within the conterminous United States. They will operate principally during daylight hours and, although they will be made in VFR conditions insofar as possible, an instrument flight plan will be filed and IFR procedures followed.

### 5-3-2. IDENTIFICATION OF SPECIAL DOE FLIGHTS

a. When transporting radioactive/high explosive materials, DOE flights will be identified by using the prefix “RAC” followed by the last four digits of the aircraft registration number.

b. The special characteristics of the cargo dictate that the flight be carefully planned along selected routes. Pilots may refuse clearances that require route or altitude changes.

### 5-3-3. NOTIFICATION OF DOE REPORTED ACCIDENT/UNREPORTED AIRCRAFT

In the event a “RAC” flight is involved in an accident, inform the STMCIC of the appropriate ARTCC so that he/she may immediately notify local and state rescue and law enforcement authorities of the accident and tell them that the flight was transporting radioactive/high explosive materials. The STMCIC must then notify the DEN air traffic security coordinator (ATSC), and the ATSC will notify the DOE Operations Control Center of the accident via urgent telephone call at (702) 295-0311. The STMCIC must be informed whenever a loss of radio/radar occurs en route or the flight is overdue at the destination. The STMCIC must then notify the OMIC and the ATSC, and the ATSC will notify the DOE duty officer.

### 5-3-4. ATMOSPHERE SAMPLING FOR NUCLEAR CONTAMINATION

a. Following a foreign nuclear weapons test, a planned arrival sampling schedule is established by the USAF. Although sampler aircraft are flight

planned to the suspected atmosphere area of nuclear contamination, the aircraft are likely to require altitude and route changes which cannot be anticipated prior to departure. The purpose of those altitude and route changes is to permit direct contact with and sampling of the *cloud* debris whose exact location and altitude distribution cannot be accurately predicted.

b. To afford these operations optimum flexibility during in-flight profiles, ATC facilities must honor in-flight clearance requests for altitude and route changes to the maximum extent possible. If necessary, other IFR traffic may be re-cleared so that requests by sampler aircraft are honored. However, in no case must the separation minima outlined in FAA Order JO 7110.65, Air Traffic Control, be compromised.

c. USAF aircraft engaged in aerial sampling missions must use the call sign “SAMP” followed by the last three digits of the aircraft’s serial number.

#### REFERENCE-

FAA Order JO 7110.65, Para 9-2-18, SAMP.

FAA Order JO 7610.4, Para 12-4-3, Atmospheric Sampling for Nuclear Contamination.

### 5-3-5. DUE REGARD OPERATIONS

a. Article 3 of the International Civil Aviation Organization (ICAO) Chicago Convention of 1944 includes the following:

1. This Convention must be applicable to civil aircraft and must not be applicable to state aircraft.

2. Aircraft used in military, customs and police services must be deemed to be state aircraft.

3. The contracting States undertake, when issuing regulations for their state aircraft, that they will have due regard for the safety of navigation of civil aircraft.

b. Department of Defense and U.S. Customs Service have specified that one of the following conditions must be met for flight operations outside U.S. Domestic airspace which are conducted under the “due regard” or “operational” prerogative of state aircraft and not in accordance with standard ICAO flight procedures. Under these conditions the PIC assumes the responsibility for separating his/her aircraft from all other air traffic.

1. Aircraft must be operated in visual meteorological conditions (VMC); or

2. Aircraft must be operated within radar surveillance and radio communications of a surface radar facility; or

3. Aircraft must be equipped with airborne radar that is sufficient to provide separation from other aircraft; or

4. Aircraft must be operated within Class G airspace.

c. Search and rescue actions for flights conducted under due regard provision are the responsibility of the parent organization.

### 5-3-6. WEATHER RECONNAISSANCE FLIGHTS

The Air Force Reserve (AFRES) 53rd Weather Reconnaissance Squadron (53WRS) and the National Oceanic & Atmospheric Administration (NOAA) Aircraft Operations Center (AOC) have responsibility for flying winter storm, hurricane, and tropical storm reconnaissance missions. When conducting these missions, aircraft from the 53WRS will utilize the call-sign "TEAL," and aircraft from the AOC will utilize the call-sign "NOAA." Due to the unique nature of these missions it is necessary to provide a degree of special handling to ensure that sufficient meteorological data is collected. The routes flown are dictated by storm movement, not traffic flows. The nature of these weather phenomena may result in very little time between the filing of a flight plan and the actual departure.

#### a. WINTER STORM MISSIONS.

1. Winter storm missions are flown in support of the National Winter Storm Operations Plan (NWSOP). Routes will normally follow published tracks as delineated in the Winter Storm Tracks LOA between CARF and AFRES.

2. Prior to a NWSOP mission, the 53WRS Current Operations or the AOC Flight Operations Division must submit an Altitude Reservation Approval Request (ALTRV APREQ) for a published or adhoc winter storm track to CARF and include the following data:

(a) Mission call-sign.

(b) Estimated time over start fix.

(c) Storm track to be flown.

(d) Location of dropsonde release points.

(e) Requested altitude(s) if other than FL290B310.

(f) Any requests to deviate from published routes.

#### NOTE-

1. *The passing of this data does not pre-empt the mission commander's responsibility to file a flight plan, nor does it constitute an ATC clearance.*

2. *A dropsonde is a cylinder shaped 18-inch long metal weather sensor, weighs 3 and 1/2 pounds, and has a parachute attached. The flight will release dropsondes at pre-designated points along the published track. The aircraft commander will want to follow a specific pressure gradient (as opposed to altimeter setting of 29.92) when flying these missions. The correct pressure for dropsondes release is normally found at altitudes between FL290 and FL310. These dropsondes are configured to fall at an average rate of 1,000 feet per minute.*

3. *Flight between departure airport and ALTRV ingress point, as well as between ALTRV egress and destination airport will be via normal flight plan filing.*

3. CARF must pass this information to impacted facilities and upon receipt of this data, appropriate facility personnel must ensure that the information is properly distributed to all control positions involved.

4. Requests to permanently change a published winter storm track or drop site must be coordinated with CARF and impacted facilities. Requests to change any other portion of the NWSOP must be coordinated with System Operations and Safety.

#### b. HURRICANE AND TROPICAL CYCLONE MISSIONS.

1. These reconnaissance/research missions are flown in support of the National Hurricane Operations Plan (NHOP) and in accordance with:

(a) The Memorandum of Agreement between the National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC), U.S. Air Force Reserve Command 53rd Weather Reconnaissance Squadron (WRS), and the Federal Aviation Administration (FAA) Air Traffic Organization (ATO) in Support of the National Hurricane Operations Plan; and

(b) Associated letters of agreement.



## Section 4. Other Flight Requests

### 5-4-1. REQUESTS FOR DEVIATION FROM TRANSPONDER REQUIREMENTS

**a.** Operations at and above 10,000 feet MSL and below the floor of Class A airspace.

**1.** Facility air traffic managers or their designated representative may approve or disapprove preflight requests for ATC authorization to deviate from transponder requirements. When coordination requirements are beyond the interphone capability of a terminal facility, the appropriate ARTCC must assume the interfacility coordination task.

**2.** Pilots/operators may be required to comply with reasonable conditions as necessary to maintain an acceptable level of safety. Such conditions may include:

**(a)** Filing a flight plan.

**(b)** Maintaining radio contact with ATC.

**(c)** Notifying ATC prior to entering the affected airspace.

**3.** Information regarding approved VFR operations in noncompliance with Mode C transponder requirements must be forwarded to all affected facilities. Facilities must ensure that the information is available at the proper control positions.

**4.** LOA between facilities and operators or individuals may be established pending the installation of appropriate transponder equipment. Deviations should not be approved for more than 6 months but additional 6-month agreements may be established when required by unusual operational circumstances.

**5.** Facility air traffic managers must ensure that the local FSDO is provided with sufficient information to permit follow-up on operators who create an unnecessary burden on the ATC system by continually attempting such operations without reasonable effort to install the appropriate equipment.

**b.** Operations within a Mode C veil and within and above Class C airspace up to 10,000 feet MSL.

**NOTE—**

*A Mode C veil is that airspace within a 30 NM radius of*

*a Class B airspace primary airport from the surface to 10,000 feet MSL excluding the Class B airspace itself.*

**1.** Approvals to deviate from the Mode C requirement by operators of aircraft without transponders must be issued by the facility air traffic manager or his/her designee.

**2.** Authorizations may be issued for a single event or on a continuing basis.

**(a)** Single-event authorizations may be issued verbally or in a letter to the proponent.

**(b)** Long term authorizations must be issued in writing by the appropriate facility air traffic manager or his/her designee. In cases involving another facility's airspace or fringe airports, the authorization should be incorporated into a LOA. Multi-signature LOAs should be used in situations involving two or more individual operators.

**3.** The following are examples of operations for which authorizations may be issued:

**(a)** Aircraft with insufficient panel space or electrical system capacity to accommodate a Mode C transponder (e.g., antique aircraft; agricultural aircraft).

**(b)** Ferrying aircraft.

**(c)** Operations for the purposes of installing or repairing an aircraft's transponder, or other maintenance/service.

**(d)** Operations conducted in facility defined areas of nonradar coverage.

**(e)** Operations conducted by aircraft based at a fringe airport must be limited to those that:

**NOTE—**

*A fringe airport is an airport that is approximately 25 NM or farther from Class B airspace primary airport and is not served by a scheduled air carrier; or an airport outside the Mode C veil at which aircraft operations in the traffic pattern routinely enter the Mode C veil.*

**(1)** Will not adversely impact other operations receiving radar service in the area.

**(2)** Are restricted to altitudes below 2,500 feet AGL.

**(3)** Are not coincidental with controlled traffic flows within the terminal area.

(4) Are conducted in the airport traffic pattern and via the most direct routing out of the Mode C veil, consistent with existing traffic and noise abatement procedures.

(f) National defense operations or other operations in the public interest which can be accommodated safely and would not adversely impact the efficient movement of traffic.

4. Written authorizations must specify an effective and expiration date/time, a description of any area(s) and altitude(s) to which the authorization is limited, and any advance call up or other communications requirements deemed appropriate.

5. Facilities must limit each authorization to the airspace for which it is responsible by having the aircraft enter/exit the affected airspace through its delegated airspace. However, to provide expeditious responses to requests, facility managers may consider other methods for processing authorization requests and incorporate such methods in letters of agreement with those ATC facilities that control traffic within the affected airspace.

## 5-4-2. REQUESTS FOR DEVIATION FROM ADS-B OUT REQUIREMENTS

This provision is designed to accommodate those civil, non-governmental operators who may have a legitimate reason for not equipping their aircraft with ADS-B Out in accordance with the requirements of 14 CFR § 91.225, and who seek an ATC authorization to operate in ADS-B airspace under the provisions of § 91.225(g). Any U.S. governmental operators seeking relief from any ADS-B requirements must contact FAA System Operations Security via email at 9-ATOR-HQ-IFOS@faa.gov for authorization.

### NOTE-

*As used in this section, "U.S. government" is defined as special U.S. Federal, State, and local government flight operations, inclusive of special flights contracted by U.S. Federal, State, or local governments.*

### REFERENCE-

*FAA Order JO 7210.3, Para 5-4-9, ADS-B Out OFF Operations.*

a. Aircraft requesting ATC authorization to deviate from the ADS-B Out equipage requirements must be transponder equipped to utilize this provision. For non-transponder equipped aircraft, operators and facilities must follow the existing

procedures contained in Paragraph 5-4-1, Requests For Deviation From Transponder Requirements.

b. Any authorization granted under this provision that satisfies an operator's regulatory requirements under 14 CFR § 91.225(g) does not guarantee that the aircraft will receive an ATC clearance. Controllers are not responsible for approving or tracking such authorizations, and may issue or deny clearances to such aircraft as they normally would on the basis of workload, surveillance availability, other traffic, and any other factors, as appropriate.

c. Operators requesting preflight ATC authorization to deviate from ADS-B Out equipage requirements for single or infrequent events should be referred to the FAA's automated authorization request web portal at <https://sapt.faa.gov>.

d. A facility ATM or their designee may approve or disapprove long-term requests for ATC authorization to deviate from ADS-B Out requirements.

### NOTE-

*A long-term request would be one of a frequent, repeated nature, such as agricultural or fringe airport operations.*

e. Facilities must limit authorizations to the airspace for which it is responsible by having the aircraft enter/exit the affected airspace through its delegated airspace.

### NOTE-

*Facility managers may consider other methods for processing authorization requests that may involve another ATC facility; e.g., the affected facility could delegate their approval authority for a given fringe airport to the originating facility, and this could be incorporated into a facility letter of agreement.*

f. Pilots/operators may be required to comply with reasonable conditions as necessary to maintain an acceptable level of safety. Such conditions may include:

1. Filing a flight plan.
2. Maintaining radio contact with ATC.
3. Notifying ATC prior to entering the affected airspace.

g. The following are examples of operations for which long-term authorizations may be issued:

1. Antique aircraft not otherwise excepted by the regulation.
2. Agricultural aircraft whose proposed areas of operations will not adversely impact other traffic in the airspace.

3. Operations conducted in facility-defined areas with no surveillance coverage.

4. Operations conducted by aircraft based at a fringe airport, provided that they:

(a) Will not adversely impact other operations receiving ATC services in the area,

(b) Are restricted to altitudes below 2,500 feet AGL,

(c) Are not coincidental with controlled traffic flows within the terminal area, such as SIDs and STARs, and

(d) Are conducted in the airport traffic pattern and via the most direct routing out of the Mode C veil, consistent with existing traffic and noise abatement procedures.

**NOTE–**

*A fringe airport is an airport that is approximately 25 NM or farther from a Class B airspace primary airport and is not served by a scheduled air carrier, or is an airport outside the Mode C veil at which aircraft operations in the traffic pattern routinely enter the Mode C veil.*

h. All long-term authorizations must be incorporated into an LOA, which must be reviewed annually. Multi-signature LOAs should be used in situations involving two or more individual operators or multiple facilities. New, revised, or canceled LOAs must be emailed to AFS-400 at 9-awa-equip.2020@faa.gov with “ADS-B LOA” in the subject line for aircraft compliance purposes, and must include the following information:

1. PIC or other requesting person’s contact information:

(a) First and last name;

(b) Phone number;

(c) Email address;

2. Aircraft Make(s) and Model(s);

3. Aircraft registration number(s);

4. Aircraft base airport or destination airport;

5. Reason for deviation request (e.g., agricultural aircraft, exhibition aircraft, fringe airport operations, etc.);

6. Any necessary restrictions on operations (e.g., time of day or geographical area limitations,

altitude limits, notification or recall requirements, flight plan and communication requirements); and

7. Authorizing ATC facility & person.

**NOTE–**

1. Annual evaluations will allow facilities to determine if the operations authorized under the LOA are creating an undue burden on the NAS and should be discontinued.

2. Flight Standards has the automated capability to correlate NAS flights to aircraft ADS-B transmissions (or “squits”). Aircraft registration numbers will be entered into this tool from the forwarded LOAs to prevent any unnecessary compliance actions being taken against an aircraft operator acting in good faith.

### 5-4-3. CROP DUSTER/ANTIQUE AIRCRAFT

Handle requests by pilots of these aircraft to operate into airports having U.S. Government operated control towers as follows:

a. If the pilot is unable to contact the tower where the authorization is needed via local telephone, he/she may relay the request through the nearest FSS or the tower if there is no collocated FSS. The request must include:

1. The aircraft identification.

2. The aircraft type.

3. The pilot’s name.

4. The departure point.

5. The destination airport.

6. The proposed date and the time of arrival.

b. The facility relaying the request must:

1. Inform the pilot that approval will be invalid if the aircraft does not arrive within 30 minutes before or after the proposed arrival time.

2. Inform the destination airport tower via Service B or Service F circuit. On Service B, the text must begin “NORDO CROP DUSTER LNDG AUZN REQ.”

c. The destination tower must transmit an approval or a disapproval to the originating facility for delivery to the pilot. This approval/disapproval must include consideration of local airport management rules, anticipated traffic, and other influencing factors. As appropriate, it must include special instructions, reason for disapproval, or a suggested alternative arrival time.

#### ■ 5-4-4. FLIGHT TEST OPERATIONS

14 CFR Part 91 requires that flight test operations be conducted only over open water or sparsely populated areas having a light volume of air traffic. FAA personnel are sometimes asked to assist aircraft operators in selecting areas where it is likely that only a few aircraft will be operating. When such requests are received, FAA personnel must cooperate in every reasonable way. In Class A airspace, aircraft may be cleared on an individual basis to areas having a light volume of air traffic, or they may be required to operate within special operating areas established for flight test activity.

#### ■ 5-4-5. SANCTIONED SPEED RECORDS

The National Aeronautic Association (NAA) sanctions all speed record attempts before they are made and certifies them on completion. The FAA has agreed to participate in this program by obtaining the certifying start and finish time. Remunerations must not be accepted for services rendered in support of this program.

#### ■ 5-4-6. CERTIFYING RECORD ATTEMPTS

FAA tower specialists must act as NAA officials for certifying record attempts by commercial aircraft provided that the following conditions are met:

**a. Departure Point:** Before takeoff, a representative of the airline must submit the NAA Certificate of Start form to the tower specialist and make arrangements with him/her to give and time the signal to the pilot to start the takeoff roll.

**b. Arrival Point:** A representative of the airline must notify the tower controller at the terminating airport as far in advance as possible that a record attempt is to be made so that he/she will be alerted to time the moment of touchdown. The airline representative must also submit the Certificate of Finish form to the tower controller for certification of the time of touchdown. The participating airline is responsible for collecting and forwarding all NAA forms certified by FAA tower specialists.

#### ■ 5-4-7. PHOTOGRAMMETRIC FLIGHTS

**a.** Except for rare instances, photogrammetric missions must be conducted on “clear days,” in VFR flight conditions, and usually when the sun angle is

high. Accordingly, infrequent IFR flight plan filing can be anticipated.

**b.** Most missions will involve a series of overlapping photographic exposures, although some missions may involve only a single exposure. In any case, the aircraft must necessarily move precisely along a predetermined course/s at a predetermined altitude. This part of the mission is called the *flight line*.

**c.** Facility management personnel must be guided by the following when handling photogrammetric flights.

**1.** Facilities are expected to make every reasonable effort to accommodate photogrammetric missions, but judgment must be exercised to minimize overall system impact.

**2.** When contacted by the pilot in advance, the controlling facility is required to secure a complete understanding of the operation to be conducted. In this regard, it must be anticipated that the operation may be delayed due to weather (this possibility should be covered in the preflight planning). Since the flight could be delayed not only for hours but in some cases for days, facility personnel must be adequately briefed to cope with such situations on a spontaneous basis.

**3.** When the pilot commences a flight line (the actual photographic run), every reasonable effort should be made to permit the flight to continue uninterrupted; i.e., without change in course or altitude. Should it become necessary to break the aircraft off the flight line, it should be vectored or cleared back into position for another run as soon as possible.

#### **NOTE—**

*The Management Association for Private Photogrammetric Surveyors (MAPPS) speaks for the photogrammetric flight industry ([www.mapps.org](http://www.mapps.org)). FAA officials have emphasized the following points to MAPPS:*

**a.** *The pilot is expected to make every effort to contact the appropriate ATC facility prior to the mission to explain flight requirements and to avoid “no notice” air/ground telephone requests whenever possible.*

**b.** *That firm “hard and fast” approvals cannot be guaranteed due to the rapid changes which can occur in the ATC operational situation, but every reasonable effort will be made by ATC to accommodate pilot requests.*

c. The pilot is expected to say “This is a photo survey mission” when contacting the ATC facility via air/ground communications and subsequently to inform the controller when the flight line is commenced.

#### ■ 5-4-8. AEROBATIC PRACTICE AREAS

Air traffic managers may approve requests to conduct aerobatic practice activity within Class B, C, D, or E airspace, provided the following requirements have been satisfied:

a. The operations are conducted in accordance with a waiver issued by the appropriate FSDO to the aircraft operator for all applicable Code of Federal Regulations (CFR).

b. The operation must not adversely affect the safety of the air traffic operation or result in a reduction of service to other users.

c. The facility manager must evaluate the impact on air traffic controller workload and the service requirements of the airspace where the operation will be conducted before authorizing these operations.

d. A facility directive must be prepared describing the procedures for managing these operations. The directive must contain, as a minimum, the controller and aircraft operator responsibilities, and a diagram that depicts the geographical area in which the activity will take place.

##### **NOTE-**

1. The air traffic manager’s approval to conduct these operations is not a waiver to the CFR. The issuance of waivers to applicable part/section of the CFR is the responsibility of the FSDO.

2. The Class of airspace the operation is conducted in determines what air traffic approval, if any, is required.

##### **REFERENCE-**

14 CFR Section 91.303, Aerobatic flight.

#### 5-4-9. ADS-B OUT OFF OPERATIONS

Operators of aircraft with functional ADS-B Out avionics installed and requesting an exception from the requirement to transmit at all times must obtain authorization from FAA System Operations Security (AJR-22). ATC facilities must not approve any such pilot or operator request to operate ADS-B Out OFF. Authorized operators must inform ATC facilities impacted by these operations as directed in FAA Order JO 7110.67.

##### **NOTE-**

14 CFR Section 91.225 requires, in part, that “each person operating an aircraft equipped with ADS-B Out must operate this equipment in the transmit mode at all times unless otherwise authorized by the FAA when that aircraft is performing a sensitive government mission for national defense, homeland security, intelligence or law enforcement purposes, and transmitting would compromise the operations security of the mission or pose a safety risk to the aircraft, crew, or people and property in the air or on the ground.”

a. ATMs should notify any controllers whose area of jurisdiction may be impacted by known authorized ADS-B Out OFF operations.

b. Direct any U.S. government requestors to contact FAA System Operations Security via email (9-ATOR-HQ-IFOS@faa.gov) for ADS-B Out OFF authorization. Inform non-U.S. government requestors that they do not qualify for ADS-B Out OFF authorization.

##### **NOTE-**

As used in this section, “U.S. government” is defined as special U.S. Federal, State, and local government flight operations, inclusive of special flights contracted by U.S. Federal, State, or local governments.

c. Inform operators checking on the status of sensitive U.S. government ADS-B Out OFF authorizations tied to a national security event to review the content of the 14 CFR 99.7 Special Security Instructions NOTAM associated with that national security event.



## Section 4. Services

### 6-4-1. ADVANCE APPROACH INFORMATION

Assign responsibility for issuing advance approach information to a specific position when more than one position could issue the data. Responsibility must be delegated in a directive in accordance with FAAO 1320.1, FAA Directives System. Display the information so that it is accessible to the controllers having need for it.

### 6-4-2. MINIMUM IFR ALTITUDES (MIA)

Determine minimum IFR altitude information for each control sector and display them at the sector. This must include off-airway minimum IFR altitude information to assist controllers in applying 14 CFR Section 91.177 for off-airway vectors and direct route operations. Facility air traffic managers must determine the appropriate chart/map method for displaying this information at the sector. Facilities must submit their MIA charts for review periodically. Submit MIA charts to Aeronautical Information Services (AIS), including automated data submissions, to ensure that obstacle clearance and controlled airspace requirements are met.

#### NOTE-

1. This may be accomplished by appending the data on sector charts or MVA charts. Special translucent sectional charts are also available. For assistance in obtaining MIA sector charts contact the Radar Video Map group at 9-AJV-HQ-ATCPRODUCTS@faa.gov.

2. For guidance in the preparation and review of Minimum IFR Altitude charts see FAA Order JO 7210.37,

*En Route Instrument Flight Rules (IFR) Minimum IFR Altitude (MIA) Sector Charts.*

#### REFERENCE-

FAA Order JO 7210.3, Para 3-8-2, Radar Mapping Standards.

### 6-4-3. SPECIAL USE FREQUENCIES

Special use frequencies (296.7, 321.3, 364.8 and 369.9MHz) are controller-to-pilot communication channels established to minimize frequency changes for certain military aircraft operating in the high altitude sectors. The specific frequencies must not be publicized. However, information concerning their authorized use may be published in official military documents or in agency directives.

### 6-4-4. PRACTICE INSTRUMENT APPROACHES

To the extent practicable, each ARTCC should provide IFR separation to aircraft not on IFR flight plans conducting practice instrument approaches to airports where that ARTCC provides approach control service.

a. At locations where IFR separation is applied to VFR aircraft conducting practice instrument approaches and that airport has a non-approach control tower or a FSS, provisions for handling such aircraft must be included in a letter of agreement.

b. ARTCCs must issue a letter to airmen advising users of airports where IFR separation is provided for VFR aircraft conducting practice instrument approaches. The letter should include appropriate frequencies for the airport concerned.





## 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, Para 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/acceptance 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.

**NOTE—**

*Appropriate Flight Standards offices are: the ACDO for air carrier operations or the FSDO or both/either.*

2. Prepare a facility directive using the information as specified in the current LAHSO directive prescribing procedures for conducting these operations. The directive must contain a diagram that depicts the airport runway configuration, identifies the configuration to be used, and specifies the Available Landing Distance (ALD) from the landing threshold to the Hold-Short Point.

**NOTE—**

*Any aircraft that is not listed in the current LAHSO directive must not be considered for LAHSO.*

**REFERENCE—**

*FAA Order JO 7110.65, Para 3–10–4, Intersecting Runway Separations.*

3. Ensure the directive identifies the eligible aircraft which may operate on each runway, based on the ALD, current LAHSO directive, and/or FAA Order JO 7360.1, Aircraft Type Designators.

4. Provide a list of runways authorized for LAHSO, along with the appropriate ALD to System Operations Airspace and Aeronautical Information Management, for publication in the Chart Supplement U.S. and appropriate U.S. Terminal Procedures Publications.

5. Conduct user briefings at least 45 days before implementation.

c. Air traffic managers must obtain concurrence from the appropriate Flight Standards field offices and conduct a preliminary environmental review before conducting LAHSO.

**REFERENCE—**

*FAA Order 1050.1, Policies and Procedures for Considering Environmental Impacts.*

**NOTE—**

*This is only applicable to those facilities not currently conducting LAHSO operations.*

## **10–3–8. LINE UP AND WAIT (LUAW) OPERATIONS**

a. The ATM must:

1. Determine an operational need exists before conducting LUAW operations.

2. Before authorizing LUAW operations, conduct a review of the impact that airport configuration and local conditions may have on the application of LUAW procedures.

3. Prepare a facility directive. The directive must prescribe items (a) through (d). Items (e) through (i) must be included if applicable.

(a) Local procedures for conducting these operations.

(b) Methods to assist the local controller in maintaining awareness of aircraft positions on the airport, for example, annotating flight progress strips or marking the location of aircraft with color-coded chips on a magnetic diagram of the airport.

**REFERENCE—**

*FAA Order JO 7210.3, Para 10–1–7, Use of Active Runways.*

(c) The consolidation and staffing of positions.

(d) The requirements necessary for issuing a landing clearance with an aircraft holding in position.

(1) The safety logic system must be operated in full core alert runway configuration.

(2) The reported weather must be ceiling of 800 feet or more.

(3) The reported visibility must be 2 miles or more.

**REFERENCE—**

*FAA Order JO 7110.65, Para 3–9–4, Line Up and Wait (LUAW), subpara c1*

*FAA Order JO 7110.65, Para 3–10–5, Landing Clearance, subpara b*

(e) Runway geometry, for example, the physical configuration of runways and other airport movement areas.

(f) Weather conditions, time of day, for example, prevailing light conditions.

**REFERENCE—**

*FAA Order JO 7110.65, Para 3–9–4, Line Up and Wait (LUAW), subpara c1 and g.*

(g) Fleet mix.

**REFERENCE—**

*FAA Order JO 7110.65, Para 3–9–6, Same Runway Separation.*

*FAA Order JO 7110.65, Para 3–9–7, Wake Turbulence Separation for Intersection Departures.*

*FAA Order JO 7110.65, Para 3–9–8, Intersecting Runway Separation.*

(h) Traffic volume; complexity restrictions.

(i) Obstructions or limitations to visibility from controller-to-aircraft and aircraft-to-aircraft perspectives.

4. Local control position must not be consolidated/combined with any other non-local control position. For example, local control must not be consolidated/combined with the operations

supervisor (OS)/controller-in-charge (CIC) position, clearance delivery, flight data, ground control, cab coordinator, etc. Local control can be combined with other local control positions to include tower associate (local assist) or local monitor position. When a Class B/helicopter position with defined control tower airspace is established, this position can be combined with local control.

**5.** The tower associate (local assist) position or a local monitor position must be staffed to permit more than one aircraft at a time to LUAW on the same runway between sunrise and sunset.

**6.** The OS/CIC position should not be combined with any other position.

**7.** Ensure OS/CICs review Paragraph 2-6-1a, Watch Supervision, with an emphasis on maintaining situational awareness and management of the operational environment with a goal toward eliminating distractions.

**8.** Do not authorize LUAW operations at an intersection between sunset and sunrise unless the following is implemented:

**(a)** The runway is used as a departure-only runway.

**(b)** Only one aircraft at a time is permitted to LUAW on the same runway.

**(c)** Document on FAA Form 7230-4, Daily Record of Facility Operation, the following: "LUAW at INT of RWY (number) and TWY (name) IN EFFECT" when using runway as a departure-only runway. "LUAW at INT of RWY (number) and TWY (name) SUSPENDED" when the runway is not used as a departure-only runway.

**(d)** At least 90 days before planned implementation, ATMs must submit the local directive outlining this operation to the appropriate Service Area Director of Air Traffic Operations for approval. The appropriate Service Area Director of Air Traffic Operations must be notified of any proposed operational changes (for example, a change to the runway or taxiway for conducting LUAW operations).

**b.** ATMs must submit operational need for LUAW and a facility directive to the appropriate Service Area Director of Air Traffic Operations for approval. ATMs must maintain a copy of the approval

correspondence from the appropriate Service Area Director of Air Traffic Operations.

**c.** The appropriate Service Area Director of Air Traffic Operations must ensure an annual review of LUAW operations is conducted for those facilities employing LUAW. The results of this review must be sent to the Director of Operations-Headquarters.

### **10-3-9. VISUAL SEPARATION**

Air traffic managers at adjacent ATCTs who wish to conduct tower-applied visual separation are required to complete the following:

**a.** Prepare a facility directive at each facility and enter into an LOA between the concerned facilities. At a minimum, the LOA must include:

**1.** Required equipment to conduct the operation.

**2.** Clear definition of the specific runway configurations and flows for the operation.

**3.** Ceiling and visibility requirements.

**4.** Missed approach instructions, where applicable.

**5.** A requirement that the aircraft type and intentions be made known to all controllers providing visual separation under these procedures.

**6.** Procedures for OS/CIC personnel to:

**(a)** Accomplish coordination between all concerned facilities prior to conducting and upon termination of the specified operation,

**(b)** Assess the operation during equipment failures.

**(c)** Terminate the operation when not permitted due to weather conditions.

**b.** Ensure that all personnel receive initial, and when appropriate, recurrent/annual refresher training.

**c.** Document the operation in a Letter to Airmen and publish it in the Special Notices Section of the Chart Supplement.

**d.** Submit an operational needs request along with an update adding tower-applied visual separation procedures to their facility directives. These documents must be approved by the appropriate Air

Traffic Services Service Area Director prior to implementation.

e. ATMs must maintain a copy of the approval correspondence.

**REFERENCE–**

FAA Order JO 7110.65, Para 7–2–1, Visual Separation.

FAA Order JO 7210.3, Para 4–3–2, Appropriate Subjects.

### 10–3–10. TAKEOFF CLEARANCE

At those airports where the airport configuration does not allow for an aircraft to completely cross one runway and hold short of the departure runway and/or where airports do not have runway hold markings between runways, the ATM must establish guidelines for how aircraft are cleared for takeoff based on the airport configurations. These guidelines must ensure aircraft are still precluded from mistakenly departing from other than the assigned runway while taking into account factors affecting aircraft being “clear of the runway,” for example, minimum distance between runways, presence of hold position markings, signage, etc. A facility directive must include where these procedures are able to be applied.

**REFERENCE–**

FAA Order JO 7110.65, Para 3–9–9, Takeoff Clearance.

Pilot/Controller Glossary Term – Clear of the Runway.

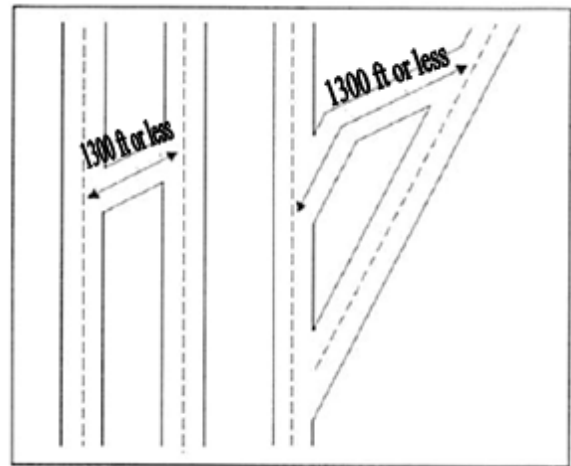
### 10–3–11. MULTIPLE RUNWAY CROSSINGS

a. Air traffic managers at airports where the taxi route between runway centerlines is 1,300 feet or less must submit a request to the appropriate Service Area Director of Air Traffic Operations for approval before authorizing multiple runway crossings.

**REFERENCE–**

FAA Order JO 7110.65, Para 3–7–2, Taxi and Ground Movement Operations

**FIG 10–3–1**  
**Multiple Runway Crossings**



b. The request must address the specific locations where multiple runway crossings will be authorized. This must only include locations where the intervening taxi route is 1,300 feet or less between runway centerlines.

c. Facilities must keep a copy of the approval correspondence issued by the appropriate Service Area Director of Air Traffic Operations.

d. Facility directives must include a diagram that depicts the runway/taxiway intersections where multiple runway crossings are authorized.

e. The Service Area Director of Air Traffic Operations must conduct an annual audit of multiple runway crossing operations authorized in their areas. The audit must ensure compliance with all applicable taxi procedures identified in FAA Order JO 7110.65 paragraph 3–7–2. The audit should include a review of all runway incursions attributable to multiple runway crossing clearances and all necessary documentation required above.

**NOTE–**

*Two or more Permission Based Exemptions may not be combined in multiple runway crossing clearances that exceed 1,300 feet.*

### 10–3–12. AIRPORT CONSTRUCTION

Whenever there is construction on a movement area, or on a non-movement area that affects movement area operations, the ATM must:

a. Notify the Airport Construction Advisory Council via email to the following address:

9-AJA-ConstructionCouncil@faa.gov. The email should describe the construction project in detail.

b. Create, approve, and publish appropriate changes to local procedures.

c. Ensure training for all operational personnel is completed and documented.

d. Provide continued training and/or briefings for the duration of the construction project to ensure operational personnel are advised on construction changes as the project progresses.

e. Ensure the latest version of the “Runway-Taxiway Construction Best Practices” for preparation and operations is reviewed by appropriate personnel during construction.

f. Ensure the latest version of the “Runway-Taxiway Construction Checklist” for preparation and operations is used and completed by appropriate personnel.

#### **NOTE–**

Both the “Runway-Taxiway Construction Best Practices” and “Runway-Taxiway Construction Checklist” are available on the Runway Safety website. Go to the FAA homepage, search Runway Safety and click the Construction link.

#### **REFERENCE–**

FAA Order JO 7110.65, Para 2-9-3, Content  
 FAA Order JO 7110.65, Para 3-7-1, Ground Traffic Movement  
 FAA Order JO 7110.65, Para 3-9-1, Departure Information  
 FAA Order JO 7110.65, Para 3-9-4, Line Up and Wait (LUAW)  
 FAA Order JO 7110.65, Para 3-9-9, Take-off Clearance  
 FAA Order JO 7110.65, Para 3-10-1, Landing Information  
 FAA Order JO 7110.65, Para 3-10-5, Landing Clearance  
 FAA Order JO 7210.3, Para 10-3-13, Change in Runway Length Due to Construction  
 FAA Order JO 7210.3, Para 10-4-1, Automatic Terminal Information Service (ATIS)

### **10-3-13. CHANGE IN RUNWAY LENGTH DUE TO CONSTRUCTION**

When a runway length has been temporarily or permanently shortened, local procedures must be issued to include procedures covering the phraseology for all taxi, takeoff and landing clearances, ATIS broadcasts, NOTAMs, and other significant activities to ensure safety is not compromised. The ATM must:

a. Review and publish local weather criteria for each runway selected during periods of construction affecting the available runway length, for example:

1. 800’ ceiling and 2 SM visibility – arrival/departure runway.

2. Weather less than 2 SM visibility - departure only runway.

b. Ensure training for operational personnel is completed prior to any runway length changes that include the following:

1. Use of the term “full length.”

2. Use of the term “shortened.”

3. Review of current and future national “Runway Construction Changes” training materials.

c. Provide continued training and/or briefings for the duration of the construction project to ensure operational personnel are advised of construction changes as the project progresses.

#### **REFERENCE–**

FAA Order JO 7110.65, Para 2-9-3, Content  
 FAA Order JO 7110.65, Para 3-7-1, Ground Traffic Movement  
 FAA Order JO 7110.65, Para 3-9-1, Departure Information  
 FAA Order JO 7110.65, Para 3-9-4, Line Up and Wait (LUAW)  
 FAA Order JO 7110.65, Para 3-9-9, Take-off Clearance  
 FAA Order JO 7110.65, Para 3-10-1, Landing Information  
 FAA Order JO 7110.65, Para 3-10-5, Landing Clearance  
 FAA Order JO 7210.3, Para 10-3-12, Airport Construction  
 FAA Order JO 7210.3, Para 10-4-1, Automatic Terminal Information Service (ATIS)

### **10-3-14. APPROACHES TO PARALLEL RUNWAYS**

a. Where vectors are provided to intercept parallel final approach courses, facilities must review and, where necessary, address speed requirements to reduce the potential for overshoot situations.

b. When determining speed requirements, consider, at a minimum, the following:

1. Airspace constraints.

2. Field elevation.

3. Fleet mix.

4. Airport layout.

5. Traffic flow(s).

6. Local weather.

c. When speed requirements are implemented, those requirements must be contained in a facility directive.

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 acceptance 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 less than 1,000 feet or visibility less than 3 miles provided all other conditions of this directive are met.

7. Application of this procedure to intersecting runways does not relieve the controller of the responsibility to provide intersecting runways separation as required in FAA Order JO 7110.65, paragraph 3-10-4.

8. A facility directive or letter of agreement must be developed specifying as a minimum:

(a) The runway configurations to be used during SCIA operations,

(b) Separation responsibility and procedures, to be applied, in the event a missed approach is initiated inside the MAP,

(c) Coordination requirements,

(d) Weather minima applicable to each configuration, if different from published minima.

**NOTE-**

*The ATM may establish higher minima than published on the SIAP to preclude, to the extent feasible, the possibility of a weather related missed approach.*

c. Authorize simultaneous instrument approaches to converging runways under the following conditions:

1. Only straight-in approaches must be made.

2. All appropriate communication, navigation, and surveillance systems are operating normally.

3. Aircraft must be informed on initial contact, or as soon as possible, that simultaneous converging approaches are in use. Broadcasting this information on the ATIS satisfies this requirement.

4. Weather activity that could impact the final approach courses must be closely monitored. Discontinue SCIA operations if weather trends indicate deteriorating conditions which would make a missed approach likely.

d. Record any occurrence of simultaneous missed approaches while conducting SCIA on FAA Form 7230-4, Daily Record of Facility Operation and submit a mandatory occurrence report (MOR).

## **10-4-9. SIMULTANEOUS OFFSET INSTRUMENT APPROACHES**

a. Simultaneous Offset Instrument Approaches (SOIA) may be conducted at airports with dual parallel runways with centerlines separated by at least 750 feet and less than 3,000 feet, with one straight-in Instrument Landing System (ILS) and one Localizer Directional Aid (LDA), offset by 2.5 to 3.0 degrees in accordance with the provisions of an authorization issued by the Director of Operations-Headquarters in coordination with AFS. A color digital display set to a 4 to 1 (4:1) aspect ratio (AR) with visual and aural



■ alerts, such as STARS final monitor aid (FMA) is required.

**b.** Notification procedures for pilots unable to accept an ILS PRM or LDA PRM approach clearance can be found on the Attention All Users Page (AAUP) of the Standard Instrument Approach Procedures (SIAP) for the specific airport PRM approach.

**c.** Closely monitor weather activity 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. (See Paragraph 10-1-6, Selecting Active Runways, subpara b Note.)

**d.** 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 and to prevent aircraft from penetrating the NTZ. Information and instructions are issued, as necessary, to contain the aircraft's flight path within the Normal Operating Zone (NOZ). Aircraft which are observed approaching the No Transgression Zone (NTZ) 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.

**e.** 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 the SOIA operation.

**f.** 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.

■ **g.** The following requirements must be met for conducting SOIA:

**1.** All PRM, FMA, ILS, LDA with glideslope, distance measuring equipment, and communications frequencies must be fully operational.

**2.** The common NOZ and NTZ lines between the final approach course centerlines must be depicted on the radar video map. The NTZ must be 2,000 feet wide and centered an equal distance from the final approach centerlines. The remaining spaces between the final approach courses are the NOZs associated with each course.

**3.** Establish monitor positions for each final approach course that have override transmit and receive capability on the appropriate control tower frequencies. A check of the override capability at each monitor position must be completed before monitoring begins. Monitor displays must be located in such proximity to permit direct verbal coordination between monitor controllers. A single display may be used for two monitor positions.

**4.** Facility directives must define the position responsible for providing the minimum applicable longitudinal separation between aircraft on the same final approach course.

**h.** Dual local control positions, while not mandatory, are desirable.

**i.** 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.

**j.** Wake turbulence requirements between aircraft on adjacent final approach courses inside the LDA MAP are as follows (standard in-trail wake separation must be applied between aircraft on the same approach course):

**1.** When runways are at least 2,500 feet apart, there are no wake turbulence requirements between aircraft on adjacent final approach courses.

**2.** For runways less than 2,500 feet apart, whenever the ceiling is greater than or equal to 500 feet above the MVA, wake vortex spacing between aircraft on adjacent final approach courses need not be applied.

**3.** For runways less than 2,500 feet apart, whenever the ceiling is less than 500 feet above the MVA, wake vortex spacing between aircraft on adjacent final approach courses, as described in FAA Order JO 7110.65, Air Traffic Control, Paragraph 5-5-4, Minima, must be applied unless acceptable mitigating techniques and operational procedures are approved by the Director of Operations-Headquar-

ters pursuant to an AFS safety assessment. A request for a safety assessment must be submitted to the Director of Operations–Headquarters through the Service Area Director of Air Traffic Operations. The wake turbulence mitigation techniques employed will be based on each airport’s specific runway geometry and meteorological conditions and implemented through local facility directives.

4. All applicable wake turbulence advisories must be issued.

k. A local implementation team must be established at each facility conducting SOIA. The team should be comprised of representatives from the local airport sponsor and other aviation organizations. The team will monitor local operational integrity issues and report/refer issues for national consideration as appropriate.

l. For any new proposal to conduct SOIA, an operational need must be identified by the ATC facility manager, validated by the appropriate Service Area Director of Air Traffic Operations, and forwarded to the Director of Operations–Headquarters for appropriate action. The statement of operational need should identify any required site specific procedures.

#### **10-4-10. REDUCED SEPARATION ON FINAL**

Separation between aircraft may be reduced to 2.5 NM in-trail separation on the final approach course within 10 NM of the runway provided an average Runway Occupancy Time (ROT) of 50 seconds or less is documented for each runway. ROT is the length of time required for an arriving aircraft to proceed from over the runway threshold to a point clear of the runway. The average ROT is calculated by using the average of the ROT of no less than 250 arrivals. The 250 arrivals need not be consecutive but must contain a representative sample of the types of aircraft that use the runway. Average ROT documentation must be revalidated within 30 days if there is a significant change in runway/taxiway

configuration, fleet mix, or other factors that may increase ROT. Revalidation need not be done for situations that are temporary in nature. Only the ROT for the affected runway(s) will need to be revalidated. All validation and revalidation documentation must be retained and contain the following information for each arrival:

- a. Aircraft call sign.
- b. Aircraft type.
- c. Time across the threshold.
- d. Time clear of the runway.

e. Items c and d above may be omitted if using a stopwatch. Record the total number of seconds required for an aircraft to proceed from over the landing threshold to a point clear of the runway when using a stopwatch.

#### **REFERENCE–**

FAA Order JO 7110.65, Subpara 5-5-4j, Minima.

#### **10-4-11. MINIMUM IFR ALTITUDES (MIA)**

At terminal facilities that require minimum IFR altitude (MIA) charts, determine MIA information for each control sector and display them at the sector. This must include off-airway minimum IFR altitude information to assist controllers in applying 14 CFR Section 91.177 for off-airway vectors and direct route operations. Facility air traffic managers must determine the appropriate chart/map method for displaying this information at the sector. Forward charts and chart data records to the appropriate Service Center Operations Support Group for certification and annual review.

#### **NOTE–**

1. For guidance in the preparation and review of Minimum IFR Altitude charts see FAA Order JO 7210.37, *En Route Instrument Flight Rules (IFR) Minimum IFR Altitude (MIA) Sector Charts*.

2. This may be accomplished by appending the data on sector charts or MVA charts; Special translucent sectional charts are also available. For assistance in obtaining MIA sector charts contact the Radar Video Map group at 9-AJV-HQ-ATCPRODUCTS@faa.gov.

purpose of this test is to ensure the aural alarm is functioning and audible to the appropriate operational personnel.

4. Controllers are aware of the towers geographic locations where aural alarms sound. (MSAW aural alarm areas.)

5. Tower aural alarm areas are identified.

6. MSAW and CA nuisance alarms are minimized by monitoring alarm frequency and location and forwarding suspected problem areas to the servicing Operational Support Facility along with any supporting documentation, via a National Automation Request (NAR) form.

#### **12-7-8. MAGNETIC VARIATION AT STARS FACILITIES**

Air traffic managers must ensure that the magnetic variation of MSAW GTMs, and radar site settings coincide. The magnetic variation must be verified annually and a change of 3 degrees or more requires a recompiling of the affected map or maps.

##### **NOTE-**

*The adapted radar site settings are the primary reference for maintaining radar antenna alignment.*

##### **REFERENCE-**

*FAA Order JO 7210.3, Para 12-7-7, Minimum Safe Altitude Warning (MSAW) and Conflict Alert (CA).*

*FAA Order JO 7210.3, Para 12-7-9, MSAW GTM Cartographic Certification, Updates, and Recompilation.*

#### **12-7-9. MSAW GTM CARTOGRAPHIC CERTIFICATION, UPDATES, AND RECOMPILATION**

a. Aeronautical Information Services (AJV-A2) performs the certification of the terrain elevations and the obstacle elevations. Each new or recompiled MSAW GTM must be certified by AJV-A2.

b. The MSAW GTM must be recompiled by the AJV-A2 if:

1. The Point of Tangency on which the map is based is relocated more than 300 feet away from its original position and/or,

2. The magnetic variation of the site changes by 3 degrees or more.

##### **NOTE-**

*Requests for new or recompiled MSAW GTMs are routed to AJV-A2. AJV-A2 can take up to eight weeks to build and deliver a GTM, particularly for mountainous terrain areas.*

#### **12-7-10. DIGITAL MAP VERIFICATION**

Verification of the accuracy of new or modified digital maps must be accomplished through the use of “targets of opportunity” flying over displayed fixes, navigational aids, etc. Any observed discrepancies must be documented to indicate the observed direction and displacement. If any identified error cannot be corrected or if a facility is otherwise dissatisfied with the results from “targets of opportunity,” a request may be made through the FICO for a flight inspection.

#### **12-7-11. MODE C INTRUDER (MCI) ALERT PARAMETERS**

a. Use the nominal value of parameters specified in the appropriate NAS Configuration Management Document and Site Program Bulletins for the MCI Alert functions, except for the base altitude parameter, as specified in subparagraphs b or c below. These parameters are set by the Operational Support Facility (OSF).

b. MCI Alert base altitude must be set at any value between ground level and 500 feet AGL at the discretion of the facility air traffic manager. Any instance of base altitudes above 500 feet AGL must be documented by the OSF.

c. Facility air traffic managers are authorized to temporarily adjust the MCI Alert base altitude at a sector(s)/position(s) when excessive MCI Alerts derogate the separation of IFR traffic. For the purpose of this section, temporary is considered to be of less than 4 hours duration, not necessarily continuous, during any calendar day. Log each occurrence on FAA Form 7230-4, when this procedure is being used, including the sector/position and temporary altitude.

d. Facility air traffic managers are authorized to inhibit the display of MCI Alert at specified sectors/position.

#### **12-7-12. OPERATIONAL MODE TRANSITION PROCEDURES**

a. Facilities must develop and maintain current detailed procedures for transition to and from the

various automated and nonautomated modes of operation.

**NOTE–**

*The architecture of STARS allows for different operational modes during display component failures. For example, a system component failure could result in positions within the same facility operating in EASL, ESL, or FSL mode. Facilities are encouraged to take advantage of this capability to minimize the impact of display system outages.*

**b.** The transition plans must include as a minimum:

**1.** Transition decision authority; i.e., the individual responsible for making the transition decision.

**2.** Specific transition procedures.

**3.** Detailed checklists specifying the duties and the responsibilities for the OSIC and other appropriate positions. The checklist must include, as a minimum, the following information/procedures:

**(a)** Transition decision authority.

**(b)** Coordination/notification procedures (intra– and interfacility).

**(c)** Specific duties/responsibilities (including detection and resolution of potential conflicts).

**NOTE–**

*Whenever possible, coordination/notification procedures and duties/responsibilities should be listed in the sequence in which they are to be accomplished.*

## **12-7-13. RADAR SELECTION PROCEDURES**

**a.** Facilities must develop and maintain current detailed procedures for selection of radar sites.

**NOTE–**

*The architecture of STARS allows for the selection of up to 16 different radars including short range and long-range radars at each display. This could result in positions within the same facility working and receiving radar information from different radars. Facilities are encouraged to take advantage of this capability to minimize the impact of radar outages, blind areas, limited radar coverage, etc.*

**b.** The selection plans must include as a minimum:

**1.** Radar selection decision authority; i.e., the individual responsible for making the radar selection decision.

**2.** Specific radar selection procedures.

**3.** Detailed checklists specifying the duties and the responsibilities for the OSIC and other appropriate positions. The checklist must include, as a minimum, the following information/procedures:

**(a)** Radar selection decision authority.

**(b)** Coordination/notification procedures (intra– and interfacility).

**(c)** Specific duties/responsibilities (including detection and resolution of potential conflicts).

**NOTE–**

*Whenever possible, coordination/notification procedures and duties/responsibilities should be listed in the sequence in which they are to be accomplished.*

## **12-7-14. MULTI-SENSOR RADAR OPERATIONS**

**a.** Facilities must develop and maintain current detailed procedures for selection and use of multi-sensor radar operations.

**NOTE–**

*The architecture of STARS allows for the use of multi-sensor radar coverage. This could result in positions within the same facility working in both single sensor slant range mode and multi-sensor mode. Facilities are encouraged to take advantage of this capability to minimize the impact of radar outages, blind areas, limited radar coverage, etc.*

**b.** The plans must include as a minimum:

**1.** Decision authority to use multi-sensor coverage; i.e., the individual responsible for making the decision.

**2.** Specific multi-sensor radar procedures.

**3.** Detailed checklists specifying the duties and the responsibilities for the OSIC and other appropriate positions. The checklist must include, as a minimum, the following information/procedures:

**(a)** Decision authority to use multi-sensor radar coverage.

**(b)** Coordination/notification procedures (intra– and interfacility).

**(c)** Specific duties/responsibilities (including detection and resolution of potential conflicts).

## Section 9. VFR Waypoint Chart Program

### 12-9-1. POLICY

a. The VFR Waypoint Chart Program was established to provide VFR pilots with a supplemental tool to assist with position awareness while navigating visually in aircraft equipped with area navigation (RNAV) receivers. The program's purpose is to enhance safety, reduce pilot deviations, and provide navigation aids for pilots unfamiliar with an area in or around Class B, Class C, and Special Use Airspace (SUA). The use of VFR waypoints does not relieve the pilot of any responsibility to comply with the requirements of 14 CFR Part 91.

b. This program contains the process for developing and submitting requests for inclusion of VFR waypoints on VFR navigational charts.

### 12-9-2. DEFINITION

A VFR waypoint is a predetermined geographical point depicted on a chart for transitioning and/or circumventing controlled and/or SUA, that is defined relative to a visual reporting point or in terms of latitude/longitude coordinates.

### 12-9-3. CRITERIA

Use the following criteria for establishing VFR waypoints on VFR navigation charts. Establishment of VFR waypoints should be minimized to reduce chart clutter and complexity. RNAV and Global Positioning System aircraft will more accurately fly over a specific point and this should be considered when developing VFR waypoints. Avoid placement of VFR waypoints directly over heavily populated or sensitive structures or areas; e.g., hospitals, government buildings, schools, power plants, etc.

#### a. Applications.

1. Avoidance of specific airspace; e.g., Class B, SUA, etc. VFR waypoints must not be used to define airspace boundaries.

2. Support VFR flyway routes with entry and exit points, and, when necessary, intermediate waypoints.

#### NOTE-

*For VFR routes, refer to Section 7, Terminal Area VFR Route Program.*

3. Assist in identifying VFR checkpoints (visual reporting points) where the associated landmark is difficult to discern.

#### NOTE-

*When a VFR waypoint is associated with a VFR checkpoint, the name of that checkpoint must be used in ATC communications.*

4. Guidance for the development of VFR waypoints to identify mountain passes/routes is or will be provided in Flight Standards' directives.

5. VFR waypoints are not for use in ATC communications; therefore, the VFR waypoint names are not pronounceable. If it is desired that a VFR waypoint be used for communications, then a new VFR checkpoint must be established. VFR checkpoints can be established by submitting a request to Aeronautical Information Services, through the Service Area Operations Support Group (OSG) describing the checkpoint and providing the latitude/longitude location.

6. VFR waypoints must not be used for those navigational aids, airports, etc., which currently exist in the National Flight Data Center database. When a VFR waypoint is desired where a fix already exists in the database, locate the VFR waypoint in the general vicinity considered the next most desired location.

#### b. VFR chart depiction:

1. VFR waypoint names (for computer-entry and flight plans) consist of five letters beginning with the letters "VP" and are retrievable from navigation databases.

2. VFR waypoints associated with VFR checkpoints will not have the waypoint symbology depicted; the Interagency Air Cartographic Committee (IACC) checkpoint symbol will remain. Only the five-letter identifier will be charted next to the name of the checkpoint.

3. VFR waypoints will be illustrated using the IACC waypoint symbology.

4. The latitude/longitude for each waypoint will be published in FAA Order JO 7350.9, Location

Identifiers, and on one of the panels of the appropriate chart.

#### 12-9-4. RESPONSIBILITIES

**a.** Proponent. Any interested party may recommend the addition of VFR waypoints to VFR navigation charts or helicopter charts via the appropriate air traffic facility.

**b.** Air traffic facilities must:

**1.** Prepare VFR waypoint recommendations. The most important task in preparing the recommendation is coordination with local aviation interests; i.e., Aircraft Owners and Pilots Association, Flight Standards District Office, Flight Service Station (FSS), military, law enforcement, etc.

**NOTE—**

*As FSSs play an integral part in the VFR flight planning process, they may serve as a valuable resource in identifying VFR waypoint recommendations.*

**2.** After consensus with all affected air traffic facilities and local aviation interests on the need and location of the proposed VFR waypoints, submit a package to the respective Service Area OSG containing:

**(a)** A new or revised VFR navigation chart depicting the location and five-letter name of each waypoint/checkpoint.

**(b)** A completed Appendix D, FAA Form 8260-2, Data Worksheet, in accordance with FAAO 8260.19, Flight Procedures and Airspace. A list of available VFR waypoint five-letter names can be obtained from the Service Area OSG or from Aeronautical Information Services, National Flight Data Center. Flight checks are not required.

**(c)** A textual description of each waypoint including the name and latitude/longitude.

**(d)** A graphic or satellite image with the precise point of the VFR waypoint depicted. It is critical that the depictions be easily readable by the Aeronautical Charting Group, Enroute and Visual Charting Team in order to verify the position for accurate charting.

**(e)** Justification/supporting rationale.

**c.** The Service Area OSG must:

**1.** Provide assistance to the air traffic facility, if requested, to prepare the textual description of each waypoint including the name and latitude/longitude and/or to depict the VFR waypoints on a satellite image.

**2.** Approve the VFR waypoint charting and ensure compliance with the prescribed criteria. If approval is granted, the Service Area OSG must forward the package to Aeronautical Information Services, National Flight Data Center at least 12 weeks prior to the planned implementation date. The planned implementation date must coincide with a publication date of the respective VFR navigation chart.

**3.** Coordinate overall activity when multiple facilities are affected by the planned use of VFR waypoints such as numerous VFR waypoints on a VFR chart.

**4.** Maintain the VFR waypoint forms (FAA Form 8260-2, Radio Fix and Holding Data Record) to include corrections, changes, or modifications, as necessary.

**5.** Conduct annual reviews.

**d.** Aeronautical Information Services, National Flight Data Center must:

**1.** Review the incoming VFR waypoint proposals for completeness.

**2.** Verify that the requested five-letter “VP” combinations are available for use.

**3.** Forward the package to Aeronautical Charting Group, Enroute and Visual Charting Team for verification of the geographic positions.

**4.** Upon verification, the Visual Charting Team must notify the National Flight Data Center prior to publication in the National Flight Data Digest (NFDD).

**5.** Maintain VFR waypoint forms (FAA Form 8260-2) to include corrections, changes, or modifications, as necessary.

**6.** After coordination, publish VFR waypoint geographic position in FAA Order JO 7350.9.

**e.** Visual Charting Team must:

**1.** Review the incoming VFR waypoint proposals for completeness.

**2.** Coordinate with the National Flight Data Center for the resolution of any geographic positions

## Section 10. Low Altitude Authorization Notification Capability

### 12-10-1. PROGRAM DESCRIPTION

a. LAANC is the term for the software used to automate small Unmanned Aircraft System(s) (sUAS) operator requests for access to controlled airspace at or below 400 feet AGL. LAANC handles authorization requests under 14 CFR § 107.41 (Part 107) and 49 U.S.C. § 44809 (Section 44809). LAANC's major elements include: FAA data sources (e.g., Unmanned Aircraft System Facility Maps (UASFM), airspace restrictions, and airspace boundaries) for use in determining authorizations; and the ability for FAA-approved LAANC UAS Service Suppliers (USSs) to process authorization information and interface with sUAS pilots.

b. LAANC functions at the operational planning stage, identifying intended sUAS operations and managing the associated authorizations. Part 107 and Section 44809 authorization requests within the UASFM can be approved automatically, in near real time. Part 107 authorization requests that fall above the UASFM and below 400 feet AGL require approval by the Air Traffic Manager (ATM) or designee. Part 107 operators may submit a request for access to airspace up to 90 days in advance. Section 44809, sUAS limited recreational operators' request for access above the UASFM will not be processed in LAANC.

### 12-10-2. UAS FACILITY MAPS (UASFM)

UASFMs have been developed by FAA facilities to establish the altitude at and below which sUAS may be granted automatic authorization. USSs will use current FAA approved UASFMs in conjunction with other required data sources and will operate within agreed LAANC USS operating rules.

#### NOTE-

For UAS facility map design, see FAA Order JO 7200.23.

### 12-10-3. SMALL UAS (sUAS) ATC AUTHORIZATIONS

Both Part 107 and Section 44809 require all sUAS operators to obtain airspace authorization from Air Traffic to fly 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. A request for authorization will contain data from an sUAS operator to a USS providing flight information about the area of the proposed operation. If the area of operation falls within a UASFM, LAANC will provide an automatic authorization and deliver this authorization to the ATM or designee. The facility retains the ability to rescind any specific authorization(s) as needed, whether after automatic approval or approval by the ATM or designee through further coordination (see 12-10-4).

### 12-10-4. FURTHER COORDINATION

a. Further coordination is the term used when an authorization processed via LAANC cannot be automatically approved. For example, if a Part 107 authorization request is sent by an operator to a USS, and the planned operation is above a UASFM altitude, the request cannot be automatically approved. Further coordination is available only to Part 107 operators. A safety justification may be optionally submitted by the Part 107 operator for the ATM's consideration.

#### NOTE-

*This Safety Justification is a one-way transmittal from the Part 107 operator that is for use with further coordination requests only. The Safety Justification is not pre-coordinated with the ATM or designee, and is optional information that the Part 107 operator may choose to include to assist the ATM or designee in determining whether to approve or deny the further coordination request.*

b. Further coordination requests in LAANC are not automatic and require the approval of the ATM or designee. If a response is not provided, further coordination requests will expire 24 hours prior to the proposed operator's start time. Facilities are not authorized to engage directly with operators to process further coordination requests.

#### NOTE-

*LAANC does not process Certificates of Authorization (COAs). COAs are processed exclusively in DroneZone in collaboration with the governing Regional Service Center. Any attempt by an operator to submit mitigations or COAs through LAANC will not be accepted.*

## 12-10-5. FACILITY RESPONSIBILITIES

a. The ATM will request access to LAANC by providing their email address and that of any designee to 9-ajt-laancpoc@faa.gov.

b. Using Chrome web browser, LAANC can be accessed at <https://laanc-atc.faa.gov>. My Access is used to sign in to LAANC.

c. Review the “Facility Preferences” page to ensure the “Approval Facilities” information is correct.

d. The ATM or designee will periodically review LAANC to maintain situational awareness of sUAS activity in their airspace.

e. The ATM or designee, workload permitting, will review further coordination requests for approval consideration. The only actions available

for requests awaiting further coordination are to “APPROVE” or “DENY” the operation.

f. When receiving a Part 107 authorization or approving a Part 107 authorization above a UASFM altitude, the ATM or designee will use their best judgement to determine if the information needs to be disseminated to the controller. If it is determined that the controller should know, then it will be distributed to the appropriate position(s).

### **NOTE-**

*LAANC will allow an operator to request an altitude above a UASFM altitude as long as the requested altitude is not above 400 ft AGL as per 14 CFR Part 107.*

g. Any previously issued authorization(s) may be rescinded via LAANC. The operator must acknowledge the action before the previously issued authorization is cancelled. If no acknowledgement is received and/or timeliness is a factor, the operator may be contacted via telephone.



## Section 4. Supplemental Duties

### 18-4-1. TELEPHONE CONFERENCES

**a.** The ATCSCC is involved in several daily telephone conferences (TELCONs). TELCONs are initiated and hosted by the ATCSCC for field facilities, the appropriate Vice Presidents, and the Chief Operating Officer. Supplemental conference capability is available through the FAA's Remote Transmitter Site and the Washington Operations Center.

**b.** TMUs/TMCs utilize TELCONs when the need arises to discuss, evaluate, or problem solve any issues. These conference calls should include the appropriate ARTCC TMU, adjacent terminal facilities/towers, the ATCSCC, and the service area TM branch or Service Area office responsible for TM.

**c.** TMUs/TMCs should actively participate in facility briefings and user meetings in order to promote, educate, and inform all concerned about the function, role, and responsibilities of TM.

**d.** TELCONs are also used to maintain operational "Hotlines." The objective of Hotlines is to provide rapid communications between FAA facilities, customers and other aviation interests when complex air traffic and airspace issues are being managed. Hotlines allow many participants the capability to problem-solve complicated issues and reduces the amount of coordination needed to implement collaborated strategies. Hotlines may be initiated at the request of both the FAA and other aviation entities that substantiate its use. The operational Hotlines are authorized for customer attendance; however, they may be limited to listen-only capability.

**1.** The ATCSCC administers, facilitates, and manages operational Hotlines.

**2.** Hotlines are used to communicate:

- (a)** Airport and airspace capacity issues.
- (b)** Constraint/capacity mitigation strategies.
- (c)** Route availability information and route alternatives.
- (d)** Weather information.
- (e)** Equipment Outages.

**(f)** Customer preferences for initiatives and alternatives.

**(g)** Special circumstances, contingency requirements and emergency events.

**(h)** All required coordination and information sharing necessary in regard to the event.

**(i)** Coordination that can be accomplished quickly and precisely with all parties. If an item requires extensive coordination, other communication sources will be used.

**(j)** Items that are not considered sensitive or classified in nature.

#### **NOTE-**

*Examples of sensitive or classified items include VIP movement and military requirements or exercises.*

**e.** TMOs are responsible for ensuring that ARTCC and TRACON TMUs participate in the "Plan, Execute, Review, Train, Improve" (PERTI) Webinar each day at 2:30 p.m. eastern time.

### 18-4-2. SPECIAL INTEREST FLIGHTS

ATCSCC, ARTCC, and CERAP: Follow procedures in FAA Order JO 7610.4, Special Operations, Chapter 12, Special Military Flights and Operations, Section 12, Special Interest Flights, regarding special interest flights from State Department designated special interest countries. Forward all issues concerning special interest flights to the DEN ATSC for relay to the appropriate authorities.

### 18-4-3. ANALYSIS

**a.** The TMU analysis function or individuals assigned analysis functions must be responsible for the collection and analysis of all available data as it pertains to traffic capacity, traffic flows, points of congestion, peak hours, etc. Specific areas of consideration include, but are not limited to:

- 1.** Sector demand (by hours).
- 2.** Sector flows (route/altitudes).
- 3.** Sector loading points.
- 4.** Sector traffic breakdown by category of user.
- 5.** Normal initiatives necessary to prevent sector saturation.

6. Alternatives to prevent saturation and relieve congestion/conflicts.

**NOTE–**

*Alternatives must take into consideration other facility/sector capabilities.*

7. Total facility traffic count and potential user demand.

8. Sector staffing required to support potential user demand.

9. Location of delays (by sector and airport).

b. Coordination with user organizations must be effected, when appropriate.

#### **18–4–4. OPERATIONS MANAGER (OM) SUPPORT**

Facility TMUs must maintain a working knowledge of the major related fields of air traffic operations/responsibilities to effectively support the STMCIC in dealing with special situations that may arise on a daily basis. Reference sources that identify these related areas are listed below.

a. Emergency plan: Numerous interfacility letters of agreement are normally located at the STMCIC complex concerning plans which have been established to provide continuity in the event of a disaster or emergency conditions that would limit air traffic service. Additionally, in these binders are instructions concerning security control of air traffic and air navigation aids, defense readiness, and physical security plans.

b. Accident procedures/bomb threats/search and rescue procedures:

1. FAA Order JO 8020.16, Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting.

2. Bomb threats.

3. National Search and Rescue Manual.

4. FAA Order 1270.1, Freedom of Information Act Program.

c. EA activity: FAA Order JO 7610.4, Special Operations.

d. Hijack situations:

1. FAA Order JO 7610.4, Special Operations.

2. FAA Order JO 7110.65, Air Traffic Control.

e. Suspect Aircraft: FAA Order JO 7110.67, Special Aircraft Operations by Law Enforcement/Military Organizations.

f. Special flight operations: FAA Order JO 7110.65, Chapter 9, Special Flights.

**NOTE–**

*In order to provide the maximum TM services, TM personnel should be utilized to perform non–TM functions only as a last resort.*

#### **18–4–5. DIVERSION RECOVERY**

a. A diversion is a flight that is required to land at other than its original destination for reasons beyond the control of the pilot/company, e.g., periods of significant weather. Diversion recovery is an initiative orchestrated by the ATCSCC and system users to minimize the impact of system disruption. Diversion recovery will be utilized during and after periods of significant weather or other phenomena that has adversely impacted the system resulting in flight diversions. The goal of the diversion recovery initiative is to ensure that flights which have already been penalized by having to divert to another airport, do not receive additional penalties or delays. Flights identified for diversion recovery must receive priority handling over other flights from their point of departure.

b. Diversion flights are identified by having “DVRSN” in the Remarks section of the flight plan, or the user inputs the information into the Diversion Recovery Tool (DRT). The following protocols will be utilized in diversion recovery procedures:

1. A flight on the DRT, as listed in TBL 18–4–1, is requesting priority. FAA facilities must ensure the auto–detect feature is not activated on their DRT. FAA facilities must view the “general aviation” and “comments” columns when utilizing the DRT.

2. “High” priority indicates the user’s preference within one company.

3. “Yes” priority indicates that special handling is requested for the flight.

4. The user submitted preferred priorities may be modified where necessary to maintain the efficiency of the system.

c. The ATCSCC must:

1. Implement diversion recovery.

2. Transmit an advisory to inform both field facilities and users that a diversion recovery initiative has been implemented and the DRT has been activated.

3. Adjust the initiative as necessary to meet changing conditions.

4. Transmit an advisory when the DRT has been deactivated.

d. The ARTCCs must:

1. Implement diversion recovery as directed by the ATCSCC.

2. Notify the ATCSCC if they do not intend to use the DRT. In such cases, the ATCSCC must send the Center a general message with the information as

stated in TBL 18-4-1, every 60 minutes until diversion recovery is no longer in effect.

3. Provide expeditious handling in returning to the system those flights identified by the ATCSCC/DRT as diversion flights.

4. Forward user diversion recovery requests to towers and TRACONS. (See TBL 18-4-1).

**NOTE-**

*DVRSN will be placed in the remarks section of the flight plan by the user.*

e. Towers and TRACONS must:

1. Provide expeditious handling in returning to the system those flights identified by the ARTCC/DRT as diversion flights.

2. Notify the overlying ARTCC TMU if they will utilize the DRT.

**TBL 18-4-1**

**User Recovery Priority Request Format**

The following flights are requesting priority handling to their original destination. Please advise the appropriate FAA facilities of this request.

ACID	Diverted To	ETD	CTD	DEST	DCNTR	ACNTR	PRIORITY	COMMENTS
ZZZ111	MDW	2210Z	–	ORD	ZAU	ZAU	–	–
ZZZ222	PIT	2200Z	–	ORD	ZOB	ZAU	HIGH	–
ZZZ555	ATL	2300Z	2320Z	IAD	ZTL	ZDC	–	–

Note: \*ETD=Proposed Wheels-up Time.

**18-4-6. VOLCANIC ASH**

a. Upon receipt of a validated report of volcanic activity and/or ash cloud movement, the ARTCC TMU whose geographic area of responsibility is impacted by such activity must:

1. Assess areas of potential or actual ash cloud location.

2. Notify the ATCSCC and the other facilities in their area of jurisdiction that may be affected. Provide as much information as possible, including PIREPS and other pertinent information that has been received.

b. Upon receipt of a Volcanic Ash Advisory (VAA), Volcanic Ash SIGMET, or ARTCC notification, the ATCSCC must:

1. Retransmit the VAA received from the Washington or Anchorage VAACs to air traffic control facilities and stakeholders via a numbered ATCSCC advisory. The VAA will also be displayed on the ATCSCC website in the advisories database.

2. Conduct, as needed, conference calls to assess constraints and TMIs associated with the volcanic ash.

**NOTE-**

*The FAA does not have the capability to predict or depict volcano eruptions or ash cloud density and movements. It is not the responsibility of the FAA to provide separation between aircraft and volcanic activity or ash clouds.*



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 acceptance/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 not only implementing TM initiatives, but also in evaluating the effectiveness of any 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. Any TM initiatives imposed between two (2) or more adjacent terminals that could have an impact on the capacity of any airport, sector, or ARTCC must be coordinated with the appropriate ARTCC TMU.

### **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 TMIs affecting your facility.

b. Subscribe to underlying facilities for the following information:

1. Runway configurations.
2. Delays.
3. Deicing.

- 4. Other.
- c. Enable notification of proposed restrictions.

### 18-5-10. NTML PROCEDURES

a. Facilities must enter, review, and respond to data in the NTML, as appropriate.

b. TMI data must be entered using the appropriate template and coordinated with the appropriate facility. Appropriate template means the one best suited for the type of event, such as a ground stop, delays, etc. The “Miscellaneous” templates must not be used if another template is appropriate. The Justification, Remarks, and Text fields must not contain any information that can be entered in other fields on the template.

**NOTE-**

*Causal information entered in the “Restriction” template is disseminated to many other software programs for monitoring the status of the NAS.*

c. Facilities must verbally contact other facilities when necessary to accomplish a task if electronic coordination has not been completed or is inappropriate to the situation, e.g., emergencies, classified information.

### 18-5-11. PROCESSING REQUESTS FOR REROUTES AND RESTRICTIONS FOR FACILITIES WITH NTML

a. Restrictions/modifications that require ATCSCC review and approval:

1. Requesting facility must enter the restriction/modification in NTML.

2. Providing facilities should review and respond using NTML within 15 minutes.

**NOTE-**

*The restriction/modification, if not responded to, will be placed in conference status 15 minutes after it has been entered by the requesting facility.*

3. If all providing facilities accept the restriction/modification using the NTML software, the ATCSCC must approve or deny the restriction/modification as appropriate. The ATCSCC may deny/amend a restriction at anytime; however, it must call the requesting facility and explain the reason for the denial/amendment. For automation purposes, the ATCSCC should not approve a restriction until all

field providers have accepted it; however, if the ATCSCC elects to override the automation and approves a restriction/modification before all provider(s) accept, it must coordinate this action with the affected provider(s).

4. When a restriction is in conference status, the requestor must initiate a conference through the ATCSCC with providers. If an amendment is necessary, the ATCSCC amends and approves the restriction while on the conference.

**NOTE-**

*Any party may initiate a conference when deemed appropriate.*

b. Restrictions/modifications that do not require ATCSCC review and approval:

1. Requesting facility must enter the restriction/modification in NTML.

2. Providing facilities should review and respond using NTML within 15 minutes.

3. If all providing facilities accept the restriction/modification using the NTML software, it must be considered coordinated/approved.

4. If a providing facility does not respond using the NTML within 15 minutes, the requesting facility must contact the providing facility/facilities to verbally coordinate the restriction/modification.

**NOTE-**

*In the event that no one at the providing facility is available to accept a restriction in NTML, the requesting facility does have the ability to force the restriction into its log so it can be used internally. This must only be done after the verbal coordination mentioned in para 18-5-1 1b4 is complete.*

c. Restrictions/modifications associated with reroutes coordinated through the ATCSCC:

1. Restrictions/modifications that have been approved/coordinated will be discussed during the development of the reroute.

2. Any facility requiring a restriction in conjunction with a reroute that has been coordinated through the ATCSCC must enter the initiative into the RSTN template with the SVR WX RERTE button enabled. NTML processes these restrictions as approved and no further coordination is required.

### 18-5-12. DELAY REPORTING

a. Verbally notify the ATCSCC through the appropriate protocol, of any arrival, departure, or en route delay reaching or expected to reach 15 minutes except for Expect Departure Clearance Time (EDCT) delays created by Ground Delay Programs (GDP), Airspace Flow Programs (AFP), Collaborative Trajectory Option Programs (CTOP), or Ground Stops (GS) issued by the ATCSCC.

b. Facilities must update their delay status through the NTML. Facilities that do not have NTML must verbally report the delay increments in 15-minute increments to the overlying facility. The first facility with NTML must enter the delay information.

c. When notified that a facility is in a 15-minute delay situation, the ATCSCC and all impacted facilities, must subscribe to the delay report through the NTML until the facility verbally notifies the ATCSCC/impacted facilities that they are no longer in delays of 15 minutes or more.

d. Facilities must verbally notify the ATCSCC, through the appropriate protocol, when delays reach or are anticipated to reach 90 minutes, except for EDCT delays as a result of a GDP, AFP or CTOP. Facilities must document in their NTML, or daily log if the facility does not have NTML, that the verbal notification was completed. The ATCSCC must document in their NTML that the 90-minute verbal notification was received. The facility manager must be notified when delays reach 90 minutes, except for delays as a result of a GDP, AFP or CTOP.

e. Facilities must notify the TMO of the overlying ARTCC, by whatever means available, of delays that reach 45 minutes or greater, except for EDCT delays as a result of a GDP, AFP, or CTOP. TMOs must then notify the Deputy Director Systems Operations (DDSO) and General Manager.

### 18-5-13. ELECTRONIC SYSTEM IMPACT REPORTS

AT facilities must coordinate with their TMU or overlying TMU for developing an electronic system impact report (SIR) for all planned outages/projects/events that could cause a significant system impact, reduction in service, or reduction in capacity (for

example, air shows, major sporting events, space launch/reentry operations, business conventions, runway closures, and procedural changes affecting terminals and/or ARTCCs). Technical Operations is responsible for reporting all unplanned outages that pertain to FAA equipment.

#### **NOTE-**

*Planned events/outages are construed to mean that the event or outage is scheduled in advance of the occurrence.*

a. The TMU must coordinate the operational impact the outage/project/event will cause with the DDSO or designee, through their TMO. This includes, but is not limited to, reduction in AAR/ADR, anticipated TMIs, alternate missed approach procedures, and anticipated delays or any other significant impacts within the NAS.

b. To ensure the ATCSCC receives all planned events and outages that could have a significant impact on the NAS, the DDSO/designee or the OSG must enter the impact data on the Strategic Events Coordination website at <http://sec.faa.gov>.

c. The electronic SIR must contain the following information:

1. Airport/facility identifier.
2. Overlying ARTCC.
3. Scheduled dates/times.
4. Description of outage/project/event.
5. Operational impact.
6. Facility recall.
7. Flight check requirements.
8. Anticipated delays.
9. Anticipated TMIs.
10. Customer coordination.
11. General information.
12. Contact information.
13. Date/time of scheduled telecons.

#### **NOTE-**

*SIRs cannot be viewed on the OIS by facilities or our customers until the ATCSCC has approved the content. Instructions for entering items in detail are provided on the Web site at <http://sec.faa.gov>.*



make an informed decision. The data may include Flow Evaluation Areas (FEA)/Flow Constrained Areas (FCA), traffic counts and lists from the Enhanced Traffic Management System, and coordination with impacted facilities.

**b.** Consider internal options prior to requesting interfacility TMIs.

**c.** When interfacility TMIs are appropriate, coordinate with the ATCSCC and provide the following information:

**1.** A detailed and specific identification of the problem.

**2.** Intrafacility actions taken/considered.

**3.** A detailed explanation of the assistance required, including options available.

**4.** Identification of potential system impacts.

**d.** Document the TMI in the NTML. Severe weather MIT coordinated through the ATCSCC must be entered in the NTML utilizing the “severe weather” feature by the facility requesting the MIT.

#### **REFERENCE–**

*For ARTCC to ARTCC and ARTCC to N90 MIT responsibilities and coordination, refer to paragraph 18–7–5.*

### **18–6–10. ATCSCC RESPONSIBILITIES FOR TMI**

**a.** Advise facilities of system impacts. The impacts will be determined by conferencing impacted facilities, as necessary, and may require sharing FEAs/FCAs.

**1.** If a MIT restriction is modified while on the conference, the ATCSCC will modify the restriction in the NTML while on the conference.

**2.** Once the restriction is coordinated, the restriction or modified restriction will be approved and sent to all relevant facilities.

**b.** Issue a decision regarding the request. For negative responses, document the rationale in disapproving the request.

**c.** Issue advisories, as appropriate.

**d.** Monitor TMI pertinent to the position of operation.

**e.** Maintain a database of MIT TMI for historical and statistical analysis.

### **18–6–11. TMIs WITHIN ARTCC AREA OF JURISDICTION**

Facilities must:

**a.** Coordinate TMIs with all impacted facilities within their jurisdiction.

**b.** Contact the ATCSCC at any time internal restrictions may result in reportable delays; have an adverse affect on other national initiatives; or result in the implementation of additional initiatives.

**c.** Enter all applicable information in the NTML.

### **18–6–12. TMIs OF 10 MIT OR LESS**

TMIs must be coordinated consistent with the following procedures:

**a.** The requesting facility notifies the providing facility in a timely manner.

**b.** The TMI must not exceed four (4) hours.

**c.** The TMI is documented in the NTML, including justification and any negative impacts associated with the TMI.

**d.** If the facilities cannot reach agreement, the restriction request is forwarded to the ATCSCC for resolution.

**e.** The ATCSCC may suspend these procedures at any time by notifying the impacted facilities.

### **18–6–13. EN ROUTE SEQUENCING PROGRAM (ESP) IMPLEMENTATION**

ESP assigns a departure time that will facilitate integration into an en route stream. Runway configuration and departure procedures must be considered for accurate projections. The TMU must:

**a.** Enter TM messages (FT, FE, etc.) to produce strips and automatically acquire full data blocks on departures, arrivals, and overflight traffic specifying the appropriate destination.

**b.** Inform appropriate sectors and ATCTs that ESP will be in effect (time) for aircraft destined to specified airports and routes.

**c.** Regulate VFR services to ensure that delays are distributed equally, especially if a ground delay program is in effect for a primary airport.

**d.** If an aircraft does not depart within the designated departure window, the appropriate sector

and/or ATCT must contact the TMU to obtain a new release time.

#### **18-6-14. TMIs OF 25 MIT OR GREATER**

a. All FAA TMUs requesting initiatives of 25 MIT or greater must:

1. Create an FEA that:

(a) Adequately represents the constrained area.

(b) Captures the flights affected by the requested initiative.

2. Share the FEA with the ATCSCC.

3. Enter the name of the FEA in the remarks section of the NTML Restrictions tab and coordinate justification for the restriction.

#### **NOTE-**

1. *TMUs are exempt from creating FEAs for situations that cannot be represented due to filtering limitations in the FEA tool.*

2. *Flights to specific runways, flights using specific departure procedures, flights that may be offloaded to alternative routing are examples of items that cannot be represented.*

b. If an extension to a 25 MIT or greater restriction is necessary, the TMU must:

1. Amend the shared FEA end time to cover the revised time period.

2. Coordinate the extension request with the ATCSCC.

c. The ATCSCC may suspend the requirements for facilities to develop FEAs associated with MIT restrictions at any time.

d. Any MIT request of 40 MIT or greater requires a conference with the ATCSCC and the requesting facility must advise their General Manager the reason for the restriction request.

#### **18-6-15. CAPPING AND TUNNELING**

a. ARTCCs must:

1. Provide a basic capping and tunneling plan in coordination with affected TRACON for all airports listed in the Operational Evolution Partnership, as a minimum.

2. Develop, maintain, coordinate, and modify all capping and tunneling plans with the TMU, the ATCSCC, and affected facilities within or adjacent to their area of jurisdiction.

3. Complete capping and tunneling plans by March 1, 2009, and update their plans biannually, no later than May 1 and November 1 of each calendar year.

4. Include in the plan:

(a) A description of planned capping and tunneling procedures that may be used within the departure ARTCC airspace.

(b) Directions of use (for example, North Plan, South Plan, etc.).

(c) Altitudes, including expected start and/or end points of capping and tunneling actions.

(d) Routes and distances of expected use.

(e) Information concerning how and when the plan affects arrivals, departures, terminal or en route airspace.

(f) All facilities impacted.

b. ARTCC TMUs must:

1. Submit facility capping and tunneling plans to the ATCSCC Automation Office for inclusion in the Operational Information System by May 15 and November 15 of each calendar year. This will allow facilities and customers to evaluate the impact of these plans and any possible strategic and tactical options to them.

2. Coordinate capping and tunneling plans through the ATCSCC before implementation.

3. Coordinate issues, alternate initiatives, and exit strategies with the ATCSCC and affected facilities.

#### **NOTE-**

*Capping and tunneling can provide a rapid solution to some situations; however, consideration needs to be given to potential weather constraints, such as turbulence and icing, and the effects of fuel and flight time for the aircraft included.*

4. Provide local information to aid the ATCSCC with developing alternative, successful reroute options for customers to consider, as needed.

5. Implement tactical initiatives and update as necessary, for example, MIT/MINIT.

**6.** Coordinate changes or cancellation of capping and tunneling plans with the ATCSCC and affected facilities.

**c.** The ATCSCC must:

**1.** Respond to requests for the implementation of the capping and tunneling plan and evaluate possible alternatives.

**2.** Notify affected facilities and customers of capping and tunneling implementation and the airports, routes, and/or airspace that will be impacted.

**3.** Transmit planned advisories before implementation of capping and tunneling, when applic-

able. Provide details regarding distance and altitude information, when available.

**4.** Transmit required advisories to implement capping and tunneling plans. This advisory should specify airports included, alternate routes and options as able, expected duration, transition points (route or altitude), reason for implementation, and modifications to the plan.

**5.** Evaluate and advise affected facilities and customers of cancellation of capping and tunneling initiatives, as appropriate.



## Section 13. Special Traffic Management Programs

### 18-13-1. SPECIAL EVENT PROGRAMS

Special procedures may be established for a location to accommodate abnormally large traffic demands (Indianapolis 500 Race, Kentucky Derby, fly-ins) or a significant reduction in airport capacity for an extended period (airport runway/taxiway closures for airport construction). These special procedures may remain in effect until the event is over or local TM procedures can handle the situation.

### 18-13-2. COORDINATION

Documentation to justify special procedures must be submitted by the facilities to the En Route and Oceanic Operations Service Area Office and Terminal Operations Area Office 90 days in advance, with a copy to the appropriate Deputy Director of System Operations (DDSO). The service area office must review and forward the request to the ATCSCC for coordination and approval 60 days in advance.

a. Documentation must include the following as a minimum:

1. The reason for implementing special procedures and a statement of system impact. Include the total number of additional flights expected.
2. Airport(s)/sector(s) to be controlled.
3. Capacity restraints by user category (five air carrier, three air taxi, seven general aviation, three military) per hour per airport.
4. Hours capacity must be controlled specified in both local time and in UTC (e.g., 0900–1859 EST, 1400–2359Z or, 0900–1859 EDT, 1300–2259Z).
5. Type of flight to be controlled (e.g., unscheduled, arrivals, departures, IFR, VFR).
6. Days of the week and dates (e.g., Thursday, May 7 through Monday, May 11 or Friday, May 22 and Sunday, May 24).
7. A draft copy of the associated NOTAM and temporary flight restrictions. (Electronic mailing preferred).
8. IFR/VFR capacity at each airport/sector.
9. Resource cost estimate including staffing and telephone requirements.

10. The number of slots to be allocated per airport, or group of airports, per time increment (e.g., ten arrivals every fifteen minutes or forty aircraft every sixty minutes).

11. Coordination accomplished with impacted facilities and any unresolved issues.

b. The service area office must forward the NOTAM to System Operations Airspace Aeronautical Information Management/Publications, for publication no later than 28 days prior to the publication date. Cutoff submittal dates and publication dates are printed inside the front cover of the monthly NOTAM Flight Information Publication.

#### NOTE–

*The toll-free number/web address to obtain a STMP slot are:*

1. Touch-tone interface: 1-800-875-9755.
2. Web interface: [www.fly.faa.gov](http://www.fly.faa.gov).
3. Trouble number: (540) 422-4246.

### 18-13-3. IMPLEMENTATION

a. Special TM programs must be managed by the ATCSCC or the affected ARTCC. The ATCSCC must transmit an advisory containing the reason for the program, airport(s)/sector(s) involved, dates and times the program will be in effect, telephone numbers to be used, and any special instructions, as appropriate. The affected ARTCC must monitor special TM programs to ensure that the demand to the center/terminal facilities is equal to the capacity.

b. The ATCSCC will disseminate a password and instructions for facility STMP reports. Detailed instructions can be found on the web site for the web interface, or in the Aeronautical Information Manual for the touch-tone interface.

### 18-13-4. AIRPORT RESERVATION OFFICE

a. The Airport Reservations Office (ARO) has been established to monitor the operation and allocation of reservations for unscheduled operations at airports designated by the Administrator under FAA adopted rules. These airports are generally known as slot controlled airports. The ARO allocates reservations on a first come, first served basis determined by the time the request is received at the ARO. Standby lists are not maintained. Reservations

are allocated through the ARO by the Enhanced Computer Voice Reservation System (e-CVRS) and not by the local air traffic control facility.

**b.** Requests for reservations for unscheduled flights at the slot controlled airports will be accepted beginning 72 hours before the proposed time of operation.

**c.** Flights with declared emergencies do not require reservations.

**d.** Refer to the Web site or touch-tone phone interface below for the current listing of the slot controlled airports, limitations, and reservation procedures.

**NOTE–**

*The Web interface and telephone number to obtain a reservation for unscheduled operations at a slot controlled airport are:*

- 1.** *<http://www.fly.faa.gov/ecvrs>.*
- 2.** *Trouble number: (540) 422-4246.*

### **19-1-8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE**

The applicant must be advised in writing of the waiver or authorization approval or denial, and, if appropriate, what is required to obtain reconsideration.

**a. Applicant:** The original waiver, authorization or denial, and a copy of the application must be forwarded to the applicant.

**b. Issuing Office:** The original of the application and a copy of the waiver, authorization or denial must be retained by the issuing office.

**c. Washington Headquarters:** Except for waivers or authorizations issued by Flight Standards Service, forward copies of waivers, authorizations or written denials to the Washington Headquarters, Rules and Regulations Group.

**d. Other Distribution:** Other than as specified above and as necessary to satisfy Service Area office needs, distribution must be limited to those offices that have a need for the information. For parasail operations covered under Paragraph 18-5-1, Service Area offices must distribute approved waivers or

authorizations to the appropriate Flight Standards District Office.

### **19-1-9. CANCELLATION OF WAIVERS AND AUTHORIZATIONS**

A waiver or authorization may be canceled at any time by the Administrator, the person authorized to grant the waiver or authorization, or the representative designated to monitor a specific operation. As a general rule, a waiver or authorization should be canceled when it is no longer required or there is an abuse of its provisions or unforeseen safety factors develop. Failure to comply with the waiver or authorization is cause for cancellation. Cancellation procedures, as applicable, must be used as follows:

**a.** Notify the holder immediately.

**b.** Verify and document the basis for the cancellation.

**c.** Notify the appropriate Service Area office, as well as the issuing office.

**d.** Provide the holder with written notice of cancellation, or written confirmation of a verbal cancellation, with copies to appropriate offices.

**e.** Take any other action deemed necessary.

FIG 19-1-1  
FAA Form 7711-1

<b>DEPARTMENT OF TRANSPORTATION</b> <b>FEDERAL AVIATION ADMINISTRATION</b> <h2 style="margin: 0;">CERTIFICATE OF WAIVER OR AUTHORIZATION</h2>	
<b>ISSUED TO</b>	(self-explanatory)
<b>ADDRESS</b>	(self-explanatory)
<p>This certificate is issued for the operations specifically described hereinafter. No person shall conduct any operation pursuant to the authority of this certificate except in accordance with the standard and special provisions contained in this certificate, and such other requirements of the Federal Aviation Regulations not specifically waived by this certificate.</p>	
<b>OPERATIONS AUTHORIZED</b>	
<p style="text-align: center;">(Indicate in detail all operations authorized. Use a separate sheet of paper if necessary.)</p>	
<b>LIST OF WAIVED REGULATIONS BY SECTION AND TITLE</b>	
<p style="text-align: center;">(This section not used for Unmanned Air Vehicle authorizations.)</p>	
<b>STANDARD PROVISIONS</b>	
<ol style="list-style-type: none"> <li>1. A copy of the application made for this certificate shall be attached to and become a part hereof.</li> <li>2. This certificate shall be presented for inspection upon the request of any authorized representative of the Administrator of the Federal Aviation Administration, or of any State or municipal official charged with the duty of enforcing local laws or regulations.</li> <li>3. The holder of this certificate shall be responsible for the strict observance of the terms and provisions contained herein.</li> <li>4. This certificate is nontransferable.</li> </ol>	
<p>Note: - This certificate constitutes a waiver of those Federal rules or regulations specifically referred to above. It does not constitute a waiver of any State law or local ordinance.</p>	
<b>SPECIAL PROVISIONS</b>	
<p>Special Provisions Nos. <u>1</u> to <u>4</u>, inclusive, are set forth on the reverse side hereof.</p>	
<p>This certificate is effective from <u>(Beginning date/time)</u> to <u>(Ending date/time)</u>, inclusive, and is subject to cancellation at any time upon notice by the Administrator or his authorized representative.</p>	
(self-explanatory) _____ (Region) _____ (Enter date the waiver was signed) _____ (Date)	<b>BY DIRECTION OF THE ADMINISTRATOR</b> (Signed by Appropriate Waiver Authority) _____ (Signature) _____ (self-explanatory) _____ (Title)

FAA Form 7711-1 (7-74)

\*1975 - G.P.O. - 1703-M/674-862/199



# 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 JO 7930.2, Notices to Airmen (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 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>.

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

### 20-6-1. PURPOSE

TFRs issued in accordance with 14 CFR Section 91.143 address space flight operations.

### 20-6-2. REQUESTING AUTHORITIES

FAA Headquarters or the Manager of Terminal or En Route and Oceanic Service Area Operations (or their designee) having control jurisdiction over the affected airspace can issue a TFR under 14 CFR Section 91.143.

### 20-6-3. DEGREE OF RESTRICTIONS

No person may operate an aircraft of U.S. registry, or pilot an aircraft under the authority of an airman certificate issued by the FAA within areas designated in a NOTAM for space flight operations except when authorized by ATC, or the proponent for the flight operation.

### 20-6-4. AIRPORTS WITHIN AIRCRAFT HAZARD AREAS AND TRANSITIONAL HAZARD AREAS

ATC services may not be provided to aircraft at airports that lie within an aircraft hazard area (AHA) or a transitional hazard area (THA) unless real-time start of activity and end of activity notification procedures for space launch and reentry operations are contained in local SOPs or LOAs. There must be sufficient lead-time prior to the start of space launch or reentry operations to allow for departure aircraft to clear the AHA and/or the THA, and to allow arrival aircraft to land and exit the airport movement area. ATC services may resume upon end of activity notification.

#### **REFERENCE-**

*Pilot/Controller Glossary Term – Aircraft Hazard Area.*

*Pilot/Controller Glossary Term – Transitional Hazard Area.*



## 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). Additionally, if this phone number is out of service, alternate back-up bridge phone numbers should be used to contact the DEN: (405) 225-2444 or (844) 663-9723 (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). Either phone may be used to contact the DEN. Additionally, if this phone number is out of service, alternate back-up bridge phone numbers should be used to contact the DEN: (405) 225-2444 or (844) 663-9723 (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 coordina-

tion 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).

## Section 5. Coordination

### 21-5-1. COORDINATION

Coordinate through verbal and automated methods. When available, use tools that permit common situational awareness.

### 21-5-2. COMMUNICATION AND DOCUMENTATION

a. When time and mission requirements permit, utilize communication techniques that emphasize consensus decision making.

b. In a tactical situation, verbal communication will be sufficient for the exercising of the authority within this section.

c. The NAS Daily Security Report will be maintained by an ATSC and will be utilized to record any verbal decisions and operational security matters within the NAS.

### 21-5-3. RESPONSIBILITIES

a. System Operations Security must:

1. Coordinate with all facilities affected by a pending or recurring security measure.

2. Ensure interagency coordination regarding any security measure within the NAS.

3. Facilitate coordination between defense/security forces and air traffic facilities.

4. Initiate inquiries regarding ATC involvement in security infractions.

b. Field facilities must:

1. Communicate and coordinate with System Operations Security and external agencies regarding security measures and associated operations in the NAS.

2. Report aviation security incidents in a timely manner.

3. Utilize the DEN for the communication of potential security related issues.

4. Ensure compliance with Agency security policies and tactical decisions.

5. Remain responsible for the safety of air traffic while achieving compliance with security initiatives.

### 21-5-4. UAS SGI ADDENDUM REQUEST PROCESS AND COORDINATION

a. SGI Qualifying Requirements. Prior to processing a UAS SGI request, the System Operations Support Center (SOSC) must ensure the requestor meets the following conditions:

1. The proponent is operating under the authority of an active COA (including Blanket COAs) or in compliance with Part 107.

2. The UAS operations to be authorized would be conducted within a timeframe incompatible with the processing time required for regular COA or Part 107 processes.

3. The requested operations will be flown by a governmental (public) entity or sponsored/supported by a governmental (public) entity.

4. The operations directly support an active (e.g., not demonstration) homeland security, law enforcement, or emergency operations effort, or some other response, relief, or recovery activity benefiting a critical public good (for example, restoration of an electrical grid or some other critical infrastructure, or media coverage). The fulfillment of this requirement is determined by the SOSC in consultation, as needed, with the FAA's interagency partners.

b. If the SGI request does not meet the qualifying requirements for an SGI Addendum, the SOSC will direct requestors to the FAA website at <https://www.faa.gov/uas/>.

c. Civil UAS Operations. The SOSC requires qualifying proponents of civil UAS operations to secure support from a governmental entity participating in the response relief or recovery effort, to which the proposed UAS operations will contribute, prior to submitting its request for a SGI Addendum.

d. DC FRZ Operations. The SOSC requires qualifying proponents of public UAS SGI operations inside the Washington DC Flight Restricted Zone (DC FRZ) to apply for an FAA/TSA airspace waiver

at <https://waivers.faa.gov> prior to submitting the request for a SGI Addendum.

1. In support of the FAA/TSA airspace waiver request, the requestor will upload all pertinent documents, including a completed “FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION”.

2. If the FAA/TSA airspace waiver request is approved, the requestor will receive an Airspace Access Program (AAP) airspace approval waiver.

e. The SOSC requires all qualifying proponents of UAS operations to request a SGI Addendum as follows:

1. Submit a completed “FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION” to the SOSC via email at 9-ATOR-HQ-SOSC@faa.gov.

**NOTE–**

*The “FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION” is located on the FAA website at [https://www.faa.gov/uas/advanced\\_operations/emergency\\_situations/](https://www.faa.gov/uas/advanced_operations/emergency_situations/) then via the link for “Emergency Operation Request Form.”*

2. Confirm receipt of the request with the SOSC via phone at (202) 267–8276.

f. The SOSC will review and coordinate the SGI Addendum requests as follows:

1. Conduct a review of the proposed operation and determine any amendments necessary to the current COA requirements (e.g., operating area, altitudes, class of airspace, transponder usage) or any authorizations or waivers under the Part 107 processes.

2. Determine if the request meets all necessary SGI criteria.

3. Coordinate with affected ATC facilities and determine and implement any needed mitigations (e.g., the application of Temporary Flight Restrictions) to reach an acceptable level of safety risk and to minimize impacts on other air traffic operations.

g. These mitigations and other authorizations, including deviations from the operator’s current COA or Part 107 authorization or waiver, will be implemented through COA addendum or Part 107 authorization/waiver, and other operational measures (e.g., coordinated ATC action and/or the application of Temporary Flight Restrictions).

**NOTE–**

*LOAs may be used in conjunction with airspace authorizations/waivers when the ATM deems it necessary; they cannot be used in lieu of the SGI process.*



## Appendix 4. Glideslope Outage Authorization Request

<b>Request for Authorization to Conduct Simultaneous Independent Approaches with Glideslope Out After 29 Days</b>	
<b>AJV-P</b>	Submit via Email to: 9-AJV-8-HQ-Correspondence@faa.gov
<b>Section 1</b>	
<b>Facility Identification: (KXYZ)</b>	
<b>Runway (###) Glideslope OTS:</b>	
<b>Dates of Expected Outage:</b> (xx/xx/xx to xx/xx/xx)	
<b>Reason Glideslope is OTS:</b>	
<b>Section 2</b>	
<b>(Simultaneous) Approaches Impacted:</b>	
<b>Runway Usage Percentage:</b>	
<b>IFR Limits/Weather Minimum:</b>	
<b>RNAV Capability/Equipage:</b>	
<b>Peak IFR Airport Arrival Rate:</b>	
<b>Section 3</b>	
<b>Impact if Authorization is Not Granted:</b>	
Facility Manager must include a narrative of the operational impact if continuation of this procedure is not approved.	
<b>Section 4</b>	
Attach a copy of the facility Contingency Authorization for Glideslope Out Procedures.	



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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

2–9–8. RUNWAY VISUAL VALUE (RVV) AND RUNWAY VISUAL RANGE (RVR) EQUIPMENT

10–3–4. RELAY OF RVV/RVR VALUES

**2. BACKGROUND:** The Runway Visual Value (RVV) systems are no longer operational in the NAS. There is no mention of this system in the Aeronautical Information Manual (AIM), or in the Aeronautical Information Publication (AIP) for the pilot community. This effort removes reference to RVV from all air traffic publications.

**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**

RVV . . . . . Runway visibility value

**OLD**

**2–9–8. RUNWAY VISUAL VALUE (RVV)  
AND RUNWAY VISUAL RANGE (RVR)  
EQUIPMENT**

**a.** FAA is responsible for checking and determining the operational status of RVV/RVR systems. Air traffic personnel must report all actual or suspect RVV/RVR malfunctions to Technical Operations Control Center personnel who are responsible for:

**1.** All checks and adjustments to the RVV/RVR systems.

**a2 through b1****NEW****1–2–4. ABBREVIATIONS**

No Change

No Change

Delete

**NEW**

**2–9–8. RUNWAY VISUAL RANGE (RVR)  
EQUIPMENT**

**a.** FAA is responsible for checking and determining the operational status of RVR systems. Air traffic personnel must report all actual or suspect RVR malfunctions to Technical Operations Control Center personnel who are responsible for:

**1.** All checks and adjustments to the RVR systems.

No Change

2. Notify the local weather observing facility immediately when malfunctioning of all airport traffic control tower (ATCT) and terminal radar approach control (TRACON) displays for the runway of concern is indicated or suspected. Upon verification of malfunction, request the weather observing facility to furnish RVV or RVR values for that runway. During such conditions, weather observing personnel will relay RVV or RVR information to tower personnel as long as equipment at the weather observing facility is known to be operating correctly and, in the case of RVR, when the high intensity runway lights (HIRL) are on setting 3 or higher. RVR values provided during the malfunction will be based on a setting of 5 unless the control tower has specifically requested data for a lower light setting. The weather observing facility will provide the RVR or RVV at the time of notification that the traffic control facility readouts are inoperative. It will also provide notification as soon as possible when the values decrease to become equal to or less than, or increase to equal or exceed:

(a) RVV ½ mile or RVR 2,400 feet.

### **OLD**

#### **10-3-4. RELAY OF RVV/RVR VALUE**

a. Relay of RVV/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 or RVV runways where data is required for two or more runways.

2. Notify the local weather observing facility immediately when malfunctioning of all airport traffic control tower (ATCT) and terminal radar approach control (TRACON) displays for the runway of concern is indicated or suspected. Upon verification of malfunction, request the weather observing facility to furnish RVR values for that runway. During such conditions, weather observing personnel will relay RVR information to tower personnel as long as equipment at the weather observing facility is known to be operating correctly and when the high intensity runway lights (HIRL) are on setting 3 or higher. RVR values provided during the malfunction will be based on a setting of 5 unless the control tower has specifically requested data for a lower light setting. The weather observing facility will provide the RVR at the time of notification that the traffic control facility readouts are inoperative. It will also provide notification as soon as possible when the values decrease to become equal to or less than, or increase to equal to or exceed:

(a) RVR 2,400 feet.

### **NEW**

#### **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.

---

## **1. PARAGRAPH NUMBER AND TITLE:**

|1-2-4. ABBREVIATIONS

21-4-7. UAS SPECIAL GOVERNMENTAL INTEREST (SGI) OPERATIONS

21-5-4. UAS SGI ADDENDUM REQUEST PROCESS AND COORDINATION

**2. BACKGROUND:** AJV-115, Emerging Technologies Team, initiated an ATO workgroup with AJT-3, AJR-2, and AJV-8 to determine if certain Unmanned Aircraft Systems policy contained in FAA Order JO 7200.23, Unmanned Aircraft Systems, could be relocated into FAA Order JO 7210.3, Facility Operation and Administration. The workgroup recommended that content from FAA Order JO 7200.23, Chapter 7, Special Government Interest (SGI), would be better suited in new paragraphs in FAA Order JO 7210.3, Chapter 21 Operations Security: Tactical, Special, and Strategic.



**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**

Add

**OLD**

Add

Add

Add

**OLD**

Add

Add

Add

Add

Add

**NEW****1-2-4. ABBREVIATIONS**

No Change

No Change

**SGI . . . . . Special Government Interest**

**NEW****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).**

**NEW****21-5-4. UAS SGI ADDENDUM REQUEST PROCESS AND COORDINATION**

**a. SGI Qualifying Requirements. Prior to processing a UAS SGI request, the System Operations Support Center (SOSC) must ensure the requestor meets the following conditions:**

**1. The proponent is operating under the authority of an active COA (including Blanket COAs) or in compliance with Part 107.**

**2. The UAS operations to be authorized would be conducted within a timeframe incompatible with the processing time required for regular COA or Part 107 processes.**

**3. The requested operations will be flown by a governmental (public) entity or sponsored/supported by a governmental (public) entity.**

- Add **4. The operations directly support an active (e.g., not demonstration) homeland security, law enforcement, or emergency operations effort, or some other response, relief, or recovery activity benefiting a critical public good (for example, restoration of an electrical grid or some other critical infrastructure, or media coverage). The fulfillment of this requirement is determined by the SOSC in consultation, as needed, with the FAA's interagency partners.**
- Add **b. If the SGI request does not meet the qualifying requirements for an SGI Addendum, the SOSC will direct requestors to the FAA website at <https://www.faa.gov/uas/>.**
- Add **c. Civil UAS Operations. The SOSC requires qualifying proponents of civil UAS operations to secure support from a governmental entity participating in the response relief or recovery effort, to which the proposed UAS operations will contribute, prior to submitting its request for a SGI Addendum.**
- Add **d. DC FRZ Operations. The SOSC requires qualifying proponents of public UAS SGI operations inside the Washington DC Flight Restricted Zone (DC FRZ) to apply for an FAA/TSA airspace waiver at <https://waivers.faa.gov> prior to submitting the request for a SGI Addendum.**
- Add **1. In support of the FAA/TSA airspace waiver request, the requestor will upload all pertinent documents, including a completed "FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION".**
- Add **2. If the FAA/TSA airspace waiver request is approved, the requestor will receive an Airspace Access Program (AAP) airspace approval waiver.**
- Add **e. The SOSC requires all qualifying proponents of UAS operations to request a SGI Addendum as follows:**
- Add **1. Submit a completed "FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION" to the SOSC via email at [9-ATOR-HQ-SOSC@faa.gov](mailto:9-ATOR-HQ-SOSC@faa.gov).**

Add	<b><u>NOTE–</u></b> <b><u>The “FAA REQUEST FORM FOR EXPEDITED SGI WAIVER OR AUTHORIZATION FOR UAS OPERATION” is located on the FAA website at <a href="https://www.faa.gov/uas/advanced_operations/emergency_situations/">https://www.faa.gov/uas/advanced_operations/emergency_situations/</a> then via the link for “Emergency Operation Request Form.”</u></b>
Add	<b><u>2. Confirm receipt of the request with the SOSC via phone at (202) 267–8276.</u></b>
Add	<b><u>f. The SOSC will review and coordinate the SGI Addendum requests as follows:</u></b>
Add	<b><u>1. Conduct a review of the proposed operation and determine any amendments necessary to the current COA requirements (e.g., operating area, altitudes, class of airspace, transponder usage) or any authorizations or waivers under the Part 107 processes.</u></b>
Add	<b><u>2. Determine if the request meets all necessary SGI criteria.</u></b>
Add	<b><u>3. Coordinate with affected ATC facilities and determine and implement any needed mitigations (e.g., the application of Temporary Flight Restrictions) to reach an acceptable level of safety risk and to minimize impacts on other air traffic operations.</u></b>
Add	<b><u>g. These mitigations and other authorizations, including deviations from the operator’s current COA or Part 107 authorization or waiver, will be implemented through COA addendum or Part 107 authorization/waiver, and other operational measures (e.g., coordinated ATC action and/or the application of Temporary Flight Restrictions).</u></b>
Add	<b><u>NOTE–</u></b> <b><u>LOAs may be used in conjunction with airspace authorizations/waivers when the ATM deems it necessary; they cannot be used in lieu of the SGI process.</u></b>

## **1. PARAGRAPH NUMBER AND TITLE: 2–1–14. AIRCRAFT IDENTIFICATION PROBLEMS**

**2. BACKGROUND:** Each aircraft or ground vehicle equipped with ADS–B is expected to transmit a unique 24–bit ICAO address. ATC automation systems alert controllers when a duplicate ICAO address occurs within the same ADS–B service volume. Such events are rare, and field observations have found that controllers are often unable to identify the second aircraft or vehicle. Recent changes to the ADS–B Performance Monitor (APM), which records every ADS–B transmission for quality analysis purposes, will allow for the automatic collection of Duplicate ICAO address events. Controller and facility reporting of Duplicate ICAO Addresses is therefore no longer required.

**3. CHANGE:****OLD****2-1-14. AIRCRAFT IDENTIFICATION PROBLEMS**

**a.** 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.

**1.** 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.*

**(a)** 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.

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

**2. 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.

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

**NEW****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:

No Change

**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.

(a) The designated facility official must email each occurrence to AFS-300 at 9-AWA-AFS-300-ADSB-FIDReport@faa.gov.

Delete

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

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

(a) Date/time of occurrence.

1. Date/time of occurrence.

(b) Location (e.g., RUS VORTAC, sector 90, Shannon Airport).

2. Location (e.g., RUS VORTAC, sector 90, Shannon Airport).

(c) Call signs involved in the occurrence.

3. Call signs involved in the occurrence.

(d) Date occurrence is reported by facility.

4. Date occurrence is reported by facility.

(e) Office/person that facility contacted.

5. Office/person that facility contacted.

Delete

**b.** Each aircraft is expected to broadcast a unique ICAO address. Should two or more aircraft broadcast the same ICAO address within the same ADS-B Service Volume (regardless of altitude), the ADS-B network may be unable to resolve the targets. Facility managers must ensure that operations supervisors report those occurrences to a designated facility official and that the following actions be taken:

**1. Scheduled air carrier aircraft:**

Delete

(a) 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 and request that action be taken to have the ICAO address reviewed for correctness.

Delete

(b) If other than one of the carriers listed in Appendix 2, Air Carrier Points of Contact for Aircraft Identification Problems, contact the operator or the chief pilot of the carrier concerned and request that action be taken to have the ICAO address reviewed for correctness.

Delete

**2. Military aircraft:** Contact base operations of the departure airport and request that action be taken to have the ICAO address reviewed for correctness. If additional assistance is required, immediately advise the military representative assigned to the Service Area office.

Delete

**3. Civil aircraft other than air carrier:** Advise Mission Support Services, Aeronautical Information Management, when two or more aircraft broadcast the same ICAO address within the same ADS-B Service Volume.

Delete

<u>(a) The designated facility official must email each occurrence to AFS-300 at 9-AWA-AFS-300-ADSB-FIDReport@faa.gov.</u>	Delete
<u>4. The designated facility official must maintain a record of actions taken and provide feedback to operations supervisors. That record should include:</u>	Delete
<u>(a) Date/time of occurrence.</u>	Delete
<u>(b) Location (e.g., RUS VORTAC, sector 90, Shannon Airport).</u>	Delete
<u>(c) Call signs involved in the occurrence.</u>	Delete
<u>(d) Date occurrence is reported by facility.</u>	Delete
<u>(e) Office/person that facility contacted.</u>	Delete

### 1. PARAGRAPH NUMBER AND TITLE:

2-1-30. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES

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

**2. BACKGROUND:** AJV-115, Emerging Technologies Team, initiated an ATO workgroup with AJT-3, AJR-2 and AJV-8 to determine if certain Unmanned Aircraft Systems (UAS) policy contained in FAA Order JO 7200.23, Unmanned Aircraft Systems, could be added to FAA Order JO 7210.3, Facility Operation and Administration and subsequently removed from FAA Order JO 7200.23. The workgroup recommended the policy concerning UAS activity reporting to be placed into separate paragraphs of the FAA Order JO 7210.3, paragraph 2-1-30, Reporting Suspicious Aircraft/Pilot Activities and paragraph 2-1-32, Reporting Unauthorized, Hazardous, or Suspicious Activities.

### 3. CHANGE:

<u>OLD</u>	<u>NEW</u>
<b>2-1-30. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES</b>	<b>2-1-30. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES</b>
<b>Title through b9</b>	No Change
<b>10.</b> 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.	No Change
<b>REFERENCE-</b> Advisory Circular 91-57, Model Aircraft Operating Standards.	<b>REFERENCE-</b> <u>FAA Order JO 7110.65, Para 2-1-2, Duty Priority.</u> Advisory Circular 91-57, Model Aircraft Operating Standards.

**OLD****NEW**

Add

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

Add

**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:**

Add

**a. Notify the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC) at (540) 422-4423/4424/4425 as soon as possible.**

Add

**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.**

Add

**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.****2-1-32 through 2-1-35****Renumber 2-1-33 through 2-1-36****1. PARAGRAPH NUMBER AND TITLE: 3-3-5. BATTERY-POWERED TRANSCEIVERS**

**2. BACKGROUND:** In 2015, a memorandum was distributed by AJT-2 in response to an ATC Zero event at an Airport Traffic Control Tower. During this event, controllers evacuated with the PET-2000 portable radio to an alternate location. Upon arrival at the remote location, they discovered the shorting plug for the radio was missing, rendering it useless. In response to this ATC Zero event, this memorandum required that transceivers used during a Contingency Plan Event must be checked weekly on both battery and commercial power. These checks were to be conducted by air traffic personnel. The memorandum noted, in accordance with FAA Order JO 6600.21C, Maintenance of Communication Transceivers, that battery-powered transceivers not identified for use during a Contingency Plan Event will be checked by Technical Operations.

In 2017, a change amended FAA Order JO 7210.3, Facility Operation and Administration, Paragraph 3-3-5, Battery-Powered Transceivers, adding the same requirements stated in the previous 2015 memorandum. Additionally, an informational note was added to this order referencing the Technical Operations maintenance requirement concerning those battery-powered transceivers not identified for use during a Contingency Plan Event. The intention of this informational note was to inform air traffic facility management which equipment they were and were not responsible for. However, the note generated confusion between air traffic personnel and Technical Operations on the responsibilities of conducting checks on battery-powered transceivers.

**3. CHANGE:****OLD****3-3-5. BATTERY-POWERED  
TRANSCEIVERS**

Facilities equipped with battery-powered transceivers must ensure that they are maintained in a state of readiness. Transceivers identified for use during a Contingency Plan Event must be checked weekly on both battery and commercial power.

Add

**NOTE-**

*In accordance with FAA Order JO 6600.21, Maintenance of Communication Transceivers, transceivers not identified for use during a Contingency Plan Event will be checked by Technical Operations.*

**NEW****3-3-5. BATTERY-POWERED  
TRANSCEIVERS**

Facilities equipped with battery-powered transceivers must ensure they are maintained in a state of readiness. Transceivers identified for use during a Contingency Plan Event must be checked weekly **for receive and transmit capability** on both battery and commercial power. **These checks facilitate controller familiarization.**

**REFERENCE-**

*FAA Order JO 7210.3, Subpara 4-6-5g, Preparation of FAA Form 7230-4.*

Delete

**1. PARAGRAPH NUMBER AND TITLE:****4-2-2. PILOT/CONTROLLER OUTREACH: OPERATION RAIN CHECK**

**2. BACKGROUND:** A recent review of language contained in FAA Order JO 7200.21 Partnership for Safety Program (PFS) noted there is no language requiring or recommending Air Traffic Managers (ATMs) to specifically include Local Safety Councils (LSC) as participants in Operation Rain Check. Based upon the results of the review, AJI determined pilot/controller outreach is outside the scope for PFS LSCs as defined in FAA Order JO 7200.21 and the requirement to offer LSCs to participate in Operation Rain Check should be removed.

**3. CHANGE:****OLD****4-2-2. PILOT/CONTROLLER OUTREACH:  
OPERATION RAIN CHECK**

Title through **b5(b)**

(c) Offer participation to Partnership for Safety Local Safety Councils, Runway Safety Action Teams, FSDOs, and Airport Authorities.

**NEW****4-2-2. PILOT/CONTROLLER OUTREACH:  
OPERATION RAIN CHECK**

No Change

(c) Offer participation to Runway Safety Action Teams, FSDOs, and Airport Authorities.



**1. PARAGRAPH NUMBER AND TITLE:****5-4-2. REQUESTS FOR DEVIATION FROM ADS-B OUT REQUIREMENTS**

**2. BACKGROUND:** When the FAA expanded the mandated use of ATC transponders to include additional airspace areas below Class A in the 1970s, guidance was added to FAA Order JO 7210.3 that allows air traffic facility managers to “approve or disapprove preflight requests for ATC authorization to deviate from transponder requirements” under limited circumstances. After January 1, 2020, in addition to the current transponder and Mode C requirements, most aircraft operating in the airspace specified in 14 CFR §91.225 must also be equipped with Automatic Dependent Surveillance – Broadcast (ADS-B) Out. However, there can be legitimate reasons for certain aircraft not already legally excluded from the equipage requirements to operate in that airspace. 14 CFR §91.225(g) allows operators of non-equipped aircraft to request flight authorization from “the ATC facility having jurisdiction over the concerned airspace” and “at least 1 hour before the proposed operation,” which is the same language similarly contained in the transponder rule, 14 CFR §91.215. Neither provision mandates that ATC grant an authorization, they merely provide a legal basis for such request to be made. Importantly, an authorization granted under these provisions does not equal, nor does it guarantee, an ATC clearance into airspace where a clearance is required. The FAA has developed a web-based tool to handle single-event authorizations, such as aircraft movement for the purpose of ADS-B Out installation. However, a letter of agreement between an operator and a local ATC facility may be justified for certain operations of a more repetitive nature, such as flights into or out of an airport near the perimeter of a Mode C Veil. Individual ATC facilities are best qualified to determine which recurrent operations can be reasonably accommodated within their own airspace.

**3. CHANGE:****OLD**

Add

Add

Add

Add

**NEW****5-4-2. REQUESTS FOR DEVIATION FROM ADS-B OUT REQUIREMENTS**

**This provision is designed to accommodate those civil, non-governmental operators who may have a legitimate reason for not equipping their aircraft with ADS-B Out in accordance with the requirements of 14 CFR § 91.225, and who seek an ATC authorization to operate in ADS-B airspace under the provisions of § 91.225(g). Any U.S. governmental operators seeking relief from any ADS-B requirements must contact FAA System Operations Security via email at 9-ATOR-HQ-IFOS@faa.gov for authorization.**

**NOTE-**

**As used in this section, “U.S. government” is defined as special U.S. Federal, State, and local government flight operations, inclusive of special flights contracted by U.S. Federal, State, or local governments.**

**REFERENCE-**

**FAA Order JO 7210.3, Para 5-4-9, ADS-B Out OFF Operations.**

- Add **a. Aircraft requesting ATC authorization to deviate from the ADS-B Out equipage requirements must be transponder equipped to utilize this provision. For non-transponder equipped aircraft, operators and facilities must follow the existing procedures contained in Paragraph 5-4-1, Requests For Deviation From Transponder Requirements.**
- Add **b. Any authorization granted under this provision that satisfies an operator's regulatory requirements under 14 CFR § 91.225(g) does not guarantee that the aircraft will receive an ATC clearance. Controllers are not responsible for approving or tracking such authorizations, and may issue or deny clearances to such aircraft as they normally would on the basis of workload, surveillance availability, other traffic, and any other factors, as appropriate.**
- Add **c. Operators requesting preflight ATC authorization to deviate from ADS-B Out equipage requirements for single or infrequent events should be referred to the FAA's automated authorization request web portal at <https://sapt.faa.gov>.**
- Add **d. A facility ATM or their designee may approve or disapprove long-term requests for ATC authorization to deviate from ADS-B Out requirements.**
- Add ***NOTE-***  
***A long-term request would be one of a frequent, repeated nature, such as agricultural or fringe airport operations.***
- Add **e. Facilities must limit authorizations to the airspace for which it is responsible by having the aircraft enter/exit the affected airspace through its delegated airspace.**
- Add ***NOTE-***  
***Facility managers may consider other methods for processing authorization requests that may involve another ATC facility; e.g., the affected facility could delegate their approval authority for a given fringe airport to the originating facility, and this could be incorporated into a facility letter of agreement.***
- Add **f. Pilots/operators may be required to comply with reasonable conditions as necessary to maintain an acceptable level of safety. Such conditions may include:**
- Add **1. Filing a flight plan.**
- Add **2. Maintaining radio contact with ATC.**

- Add **3. Notifying ATC prior to entering the affected airspace.**
- Add **g. The following are examples of operations for which long-term authorizations may be issued:**
- Add **1. Antique aircraft not otherwise excepted by the regulation.**
- Add **2. Agricultural aircraft whose proposed areas of operations will not adversely impact other traffic in the airspace.**
- Add **3. Operations conducted in facility-defined areas with no surveillance coverage.**
- Add **4. Operations conducted by aircraft based at a fringe airport, provided that they:**
- Add **(a) Will not adversely impact other operations receiving ATC services in the area,**
- Add **(b) Are restricted to altitudes below 2,500 feet AGL,**
- Add **(c) Are not coincidental with controlled traffic flows within the terminal area, such as SIDs and STARs, and**
- Add **(d) Are conducted in the airport traffic pattern and via the most direct routing out of the Mode C veil, consistent with existing traffic and noise abatement procedures.**
- Add **NOTE–**  
**A fringe airport is an airport that is approximately 25 NM or farther from a Class B airspace primary airport and is not served by a scheduled air carrier, or is an airport outside the Mode C veil at which aircraft operations in the traffic pattern routinely enter the Mode C veil.**
- Add **h. All long-term authorizations must be incorporated into an LOA, which must be reviewed annually. Multi-signature LOAs should be used in situations involving two or more individual operators or multiple facilities. New, revised, or canceled LOAs must be emailed to AFS-400 at 9-awa-equip.2020@faa.gov with “ADS-B LOA” in the subject line for aircraft compliance purposes, and must include the following information:**
- Add **1. PIC or other requesting person’s contact information:**
- Add **(a) First and last name;**
- Add **(b) Phone number;**
- Add **(c) Email address;**

Add	<b><u>2. Aircraft Make(s) and Model(s);</u></b>
Add	<b><u>3. Aircraft registration number(s);</u></b>
Add	<b><u>4. Aircraft base airport or destination airport;</u></b>
Add	<b><u>5. Reason for deviation request (e.g., agricultural aircraft, exhibition aircraft, fringe airport operations, etc.);</u></b>
Add	<b><u>6. Any necessary restrictions on operations (e.g., time of day or geographical area limitations, altitude limits, notification or recall requirements, flight plan and communication requirements); and</u></b>
Add	<b><u>7. Authorizing ATC facility &amp; person.</u></b>
Add	<b><u>NOTE–</u></b> <b><u>1. Annual evaluations will allow facilities to determine if the operations authorized under the LOA are creating an undue burden on the NAS and should be discontinued.</u></b>
Add	<b><u>2. Flight Standards has the automated capability to correlate NAS flights to aircraft ADS–B transmissions (or “squits”). Aircraft registration numbers will be entered into this tool from the forwarded LOAs to prevent any unnecessary compliance actions being taken against an aircraft operator acting in good faith.</u></b>
<b>5–4–<del>2</del> through 5–4–<del>7</del></b>	
<b>Renumber 5–4–<del>3</del> through 5–4–<del>8</del></b>	

**1. PARAGRAPH NUMBER AND TITLE:** 5–4–9. ADS–B OUT OFF OPERATIONS

**2. BACKGROUND:** As originally enacted, 14 CFR 91.225(f) stated, “Each person operating an aircraft equipped with ADS–B Out must operate this equipment in the transmit mode at all times.” This was recently amended by adding, in part, “unless otherwise authorized by the FAA when that aircraft is performing a sensitive government mission for national defense, homeland security, intelligence or law enforcement purposes, and transmitting would compromise the operations security of the mission or pose a safety risk to the aircraft, crew, or people and property in the air or on the ground.” The conditions for allowing an aircraft to operate without transmitting Automatic Dependent Surveillance–Broadcast (ADS–B) Out are thus very narrow. FAA System Operations Security will be solely responsible for approving those authorizations, and for specifying which missions must be coordinated with affected ATC facilities.

**3. CHANGE:****OLD**

Add

Add

Add

Add

Add

Add

Add

**NEW****5-4-9. ADS-B OUT OFF OPERATIONS**

**Operators of aircraft with functional ADS-B Out avionics installed and requesting an exception from the requirement to transmit at all times must obtain authorization from FAA System Operations Security (AJR-22). ATC facilities must not approve any such pilot or operator request to operate ADS-B Out OFF. Authorized operators must inform ATC facilities impacted by these operations as directed in FAA Order JO 7110.67.**

**NOTE-**

**14 CFR Section 91.225 requires, in part, that “each person operating an aircraft equipped with ADS-B Out must operate this equipment in the transmit mode at all times unless otherwise authorized by the FAA when that aircraft is performing a sensitive government mission for national defense, homeland security, intelligence or law enforcement purposes, and transmitting would compromise the operations security of the mission or pose a safety risk to the aircraft, crew, or people and property in the air or on the ground.”**

**a. ATMs should notify any controllers whose area of jurisdiction may be impacted by known authorized ADS-B Out OFF operations.**

**b. Direct any U.S. government requestors to contact FAA System Operations Security via email (9-ATOR-HQ-IFOS@faa.gov) for ADS-B Out OFF authorization. Inform non-U.S. government requestors that they do not qualify for ADS-B Out OFF authorization.**

**NOTE-**

**As used in this section, “U.S. government” is defined as special U.S. Federal, State, and local government flight operations, inclusive of special flights contracted by U.S. Federal, State, or local governments.**

**c. Inform operators checking on the status of sensitive U.S. government ADS-B Out OFF authorizations tied to a national security event to review the content of the 14 CFR 99.7 Special Security Instructions NOTAM associated with that national security event.**

**1. PARAGRAPH NUMBER AND TITLE:** 10–3–1. DISSEMINATION OF WEATHER INFORMATION

**2. BACKGROUND:** Hazardous Inflight Weather Advisory Service (HIWAS) is a legacy service that broadcasts hazardous weather advisories over a network of very high frequency omni-directional radio range (VOR) outlets across the continental United States (CONUS). Originally, a specialist created these broadcasts using a script. Today, the broadcast is made by a computer-based system using text to voice technology. Airborne pilots can access these recordings over select VOR outlets. Flight Information Service–Broadcast (FIS–B) replaces the current HIWAS broadcast with both a graphical and textual display of hazardous weather information right to the cockpit at lower altitudes and over a greater geographical area. For those pilots who have not yet adopted the latest technology, an advisory alert broadcast will still be made to advise these pilots that adverse weather conditions exist and to contact Flight Service for additional information if needed.

**3. CHANGE:****OLD****10–3–1. DISSEMINATION OF WEATHER INFORMATION****Title through b1**

**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 Service (HIWAS).

**NEW****10–3–1. DISSEMINATION OF WEATHER INFORMATION****No Change**

**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.

**1. PARAGRAPH NUMBER AND TITLE:**

10–4–9. PRECISION RUNWAY MONITOR–SIMULTANEOUS OFFSET INSTRUMENT APPROACHES

**2. BACKGROUND:** The Flight Standards Service (AFS) completed safety study DOT–FAA–AFS–400–84 in July 2014 titled Separation Requirements for Simultaneous Offset Independent Dual Instrument Approaches – High Update Rate Surveillance Not Required. The primary purpose of the study was to assess collision risk using an ASR–9 in lieu of high update rate surveillance for Simultaneous Independent Dual Instrument Approaches to runways with centerline spacing of 3000 feet or greater. Additionally, AFS evaluated the unique offset approach called Simultaneous Offset Instrument Approaches (SOIA) at San Francisco (SFO) where the runways are separated by 750 feet. AFS concluded that since the SOIA operations terminates with a visual segment from the point where the approaches reach the 3000 foot point between the two approach courses to the runway thresholds, that this study can be used to alleviate the high update rate surveillance requirements for SOIA operations. Historically, the PRM terminology has been synonymous with a type of high update radar system. In 2014, AFS removed the requirement for a high update rate surveillance system from the required facets of PRM.

**3. CHANGE:****OLD****10-4-9. PRECISION RUNWAY  
MONITOR-SIMULTANEOUS OFFSET  
INSTRUMENT APPROACHES**

**a.** Precision Runway Monitor-Simultaneous Offset Instrument Approaches (PRM-SOIA) may be conducted at airports with dual parallel runways with centerlines separated by at least 750 feet and less than 3,000 feet, with one straight-in Instrument Landing System (ILS) and one Localizer Directional Aid (LDA), offset by 2.5 to 3.0 degrees using a PRM system with a 1.0 second radar update system in accordance with the provisions of an authorization issued by the Director of Operations-Headquarters in coordination with AFS. A high-resolution color monitor with alert algorithms, such as a final monitor aid (FMA) must be required.

**b through d**

**e.** 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 the PRM-SOIA operation.

**f**

**g.** The following requirements must be met for conducting PRM-SOIA:

**g1 through j2**

**3.** For runways less than 2,500 feet apart, whenever the ceiling is less than 500 feet above the MVA, wake vortex spacing between aircraft on adjacent final approach courses as described in FAA Order JO 7110.65, Air Traffic Control, Paragraph 5-5-4, Minima, must be applied unless acceptable mitigating techniques and operational procedures are approved by the Director of Operations-Headquarters pursuant to an AFS safety assessment. A request for a safety assessment must be submitted to the Director of Operations-Headquarters through the service area office manager. The wake turbulence mitigation techniques employed will be based on each airport's specific runway geometry and meteorological conditions and implemented through local facility directives.

**j4****NEW****10-4-9. SIMULTANEOUS OFFSET  
INSTRUMENT APPROACHES**

**a.** Simultaneous Offset Instrument Approaches (SOIA) may be conducted at airports with dual parallel runways with centerlines separated by at least 750 feet and less than 3,000 feet, with one straight-in Instrument Landing System (ILS) and one Localizer Directional Aid (LDA), offset by 2.5 to 3.0 degrees in accordance with the provisions of an authorization issued by the Director of Operations-Headquarters in coordination with AFS. A color digital display set to a 4 to 1 (4:1) aspect ratio (AR) with visual and aural alerts, such as STARS final monitor aid (FMA) is required.

**No Change**

**e.** 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 the SOIA operation.

**No Change**

**g.** The following requirements must be met for conducting SOIA:

**No Change**

**3.** For runways less than 2,500 feet apart, whenever the ceiling is less than 500 feet above the MVA, wake vortex spacing between aircraft on adjacent final approach courses, as described in FAA Order JO 7110.65, Air Traffic Control, Paragraph 5-5-4, Minima, must be applied unless acceptable mitigating techniques and operational procedures are approved by the Director of Operations-Headquarters pursuant to an AFS safety assessment. A request for a safety assessment must be submitted to the Director of Operations-Headquarters through the Service Area Director of Air Traffic Operations. The wake turbulence mitigation techniques employed will be based on each airport's specific runway geometry and meteorological conditions and implemented through local facility directives.

**No Change**

**k.** A local implementation team must be established at each facility conducting PRM-SOIA. The team should be comprised of representatives from the local airport sponsor and other aviation organizations. The team will monitor local operational integrity issues and report/refer issues for national consideration as appropriate.

**l.** For any new proposal to conduct PRM-SOIA, an operational need must be identified by the ATC facility manager, validated by the appropriate Service Area Director of Air Traffic Operations, and forwarded to the Director of Operations-Headquarters for appropriate action. The statement of operational need should identify any required site specific procedures.

**k.** A local implementation team must be established at each facility conducting SOIA. The team should be comprised of representatives from the local airport sponsor and other aviation organizations. The team will monitor local operational integrity issues and report/refer issues for national consideration as appropriate.

**l.** For any new proposal to conduct SOIA, an operational need must be identified by the ATC facility manager, validated by the appropriate Service Area Director of Air Traffic Operations, and forwarded to the Director of Operations-Headquarters for appropriate action. The statement of operational need should identify any required site specific procedures.

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**1. PARAGRAPH NUMBER AND TITLE:**

- 12-10-1. PROGRAM DESCRIPTION
- 12-10-2. UAS FACILITY MAPS (UASFM)
- 12-10-3. PART 101E NOTIFICATIONS
- 12-10-4. PART 107 ATC AUTHORIZATIONS
- 12-10-5. UAS SERVICE SUPPLIER (USS)
- 12-10-6. VOLUNTARY NOTIFICATION
- 12-10-7. REQUIRED NOTIFICATION
- 12-10-8. REQUIRED AUTHORIZATION
- 12-10-9. FURTHER COORDINATION

**2. BACKGROUND:** The FAA Reauthorization Act of 2018 changed the notification requirement in controlled airspace for “modelers/hobbyist.” The new ruling covered under 49 U.S.C. § 44809 (Section 349) and the “modelers/hobbyist” are now referred to as limited recreational fliers. They must now receive authorization to operate in controlled airspace. Low Altitude Authorization and Notification Capability (LAANC) has been modified to accommodate automatic authorization of recreational operators, similar to how Part 107 operators receive their authorization.



**3. CHANGE:****OLD****12-10-1. PROGRAM DESCRIPTION**

a. LAANC is the term for the software used to automate small Unmanned Aircraft System(s) (sUAS) operator requests for access to airspace and receive FAA issued authorizations for Part 107 operations. Additionally, LAANC allows model aircraft (Part 101E) operators to notify ATC of planned operations within 5 miles of an airport. LAANC major elements include the FAA air traffic facility's Unmanned Aircraft System(s) Facility Map (UASFM) data for use in determining authorizations, the use of sUAS Service Suppliers (USSs) to process notification and authorization information to operators, and the ability for multiple USSs to provide services.

b. LAANC functions at the operational planning stage, identifying intended operations and managing the associated authorizations and notifications. Operators may submit a request for access to airspace up to 90 days in advance. To provide adequate time for ATC situational awareness, sUAS operators are encouraged to submit their Part 107 requests at least one or two days before the operation commences. Most LAANC information exchanges occur in near real time (notifications and automatic authorizations) and provide immediate feedback to operators.

**NEW****12-10-1. PROGRAM DESCRIPTION**

a. LAANC is the term for the software used to automate small Unmanned Aircraft System(s) (sUAS) operator requests for access to **controlled** airspace **at or below 400 feet AGL. LAANC handles authorization requests under 14 CFR § 107.41 (Part 107) and 49 U.S.C. § 44809 (Section 44809). LAANC's major elements include: FAA data sources (e.g., Unmanned Aircraft System Facility Maps (UASFM), airspace restrictions, and airspace boundaries) for use in determining authorizations; and the ability for FAA-approved LAANC UAS Service Suppliers (USSs) to process authorization information and interface with sUAS pilots.**

b. LAANC functions at the operational planning stage, identifying intended **sUAS** operations and managing the associated authorizations. **Part 107 and Section 44809 authorization requests within the UASFM can be approved automatically, in near real time. Part 107 authorization requests that fall above the UASFM and below 400 feet AGL require approval by the Air Traffic Manager (ATM) or designee. Part 107 operators may submit a request for access to airspace up to 90 days in advance. Section 44809, sUAS limited recreational operators' request for access above the UASFM will not be processed in LAANC.**

**OLD****12-10-2. UAS FACILITY MAPS (UASFM)**

UASFMs have been developed by FAA facilities to establish the altitude thresholds at and below which sUAS may be granted automatic authorization under Part 107. USSs will use current FAA approved UASFMs and will operate within agreed LAANC USS operating rules. An authorization request made within a UASFM altitude will be issued by the FAA to the USS. The USS will relay the authorization to the receiving facility. The facility retains the ability to cancel any such specific authorization(s) as needed. UASFMs also serve as a warning threshold for Part 101E operations, as the airspace above automatic authorization limits indicates an area that an FAA facility has identified as potentially active with controlled manned air traffic.

***NOTE-***

*For UAS facility map design, see FAA Order JO 7200.23.*

**OLD****12-10-3. PART 101E NOTIFICATIONS**

Part 101E notifications sent through LAANC by sUAS operators to ATC facilities provide situational awareness about planned sUAS operations in a particular airspace. Notifications are sent from sUAS operators, also known as hobbyists, to ATC facilities with a USS acting as an intermediary.

**NEW****12-10-2. UAS FACILITY MAPS (UASFM)**

UASFMs have been developed by FAA facilities to establish the altitude at and below which sUAS may be granted automatic authorization. USSs will use current FAA approved UASFMs **in conjunction with other required data sources** and will operate within agreed LAANC USS operating rules.

No Change

**NEW**

Delete

Delete

**OLD****12-10-4. PART 107 ATC AUTHORIZATIONS**

Part 107 authorizations or denials are sent to an operator in response to a request to operate in controlled airspace. A request for authorization will contain data from a sUAS operator to a USS providing flight information about the area of operation. If the area of operation falls within a UASFM altitude, LAANC will provide an automatic authorization. If the area of operation falls above a UASFM altitude, LAANC facilitates a further coordination process. The facility may approve or deny such requests through LAANC.

**NEW****12-10-3. SMALL UAS (sUAS) ATC AUTHORIZATIONS**

Both Part 107 and Section 44809 require all sUAS operators to obtain airspace authorization from Air Traffic to fly 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. A request for authorization will contain data from an sUAS operator to a USS providing flight information about the area of the proposed operation. If the area of operation falls within a UASFM, LAANC will provide an automatic authorization and deliver this authorization to the ATM or designee. The facility retains the ability to rescind any specific authorization(s) as needed, whether after automatic approval or approval by the ATM or designee through further coordination (see 12-10-4).

**OLD****12-10-5. UAS SERVICE SUPPLIERS (USS)**

LAANC uses industry partner UAS Service Suppliers (USSs) to provide services specific to sUAS operations. Such services are provided through an exchange of information between the FAA and the USS, whereby the USS is the primary interface to the operator. The USS accesses UASFMs and USS operating rules provided by the FAA to grant the automatic authorization of sUAS operations that meet the requirement of 14 CFR Part 107 operations and fall within a UASFM altitude.

**NEW**

Delete

Delete

**OLD****12-10-6. VOLUNTARY NOTIFICATION**

LAANC will inform the sUAS operator when an operation entered into LAANC takes place in areas where ATC authorization/notification is not required (outside controlled airspace/beyond 5 statute miles from an airport). LAANC will provide confirmation to the operator that the flight information has been received and a record will be submitted to the FAA.

**NEW**

Delete

Delete

**OLD****12-10-7. REQUIRED NOTIFICATION**

If ATC notification is required (Part 101E), the operator may submit their proposed flight information to a USS. The USS will check if a notification is required based on whether or not the operation falls within 5 statute miles of an airport. If notification is required, the USS will facilitate the notification via LAANC.

**NEW**

Delete

Delete

**OLD****12-10-8. REQUIRED AUTHORIZATION**

a. If ATC authorization is required (Part 107), the sUAS operator may submit their proposed flight information to a USS. The USS will use the appropriate UASFM to determine if an operation can be automatically authorized. If the flight falls within the UASFM altitude, FAA authorization is provided to the operator. Flight details are provided via the LAANC website to the facility.

**NEW**

Delete

Delete

b. If the proposed flight operation is above a UASFM altitude, further coordination is required at the facility level. The USS makes LAANC further coordination processes an option available to the operator, with the understanding that further coordination requires the consideration of ATC personnel and a response will not be immediate. Resources permitting, facility personnel may provide authorization or denial electronically back through LAANC, which will be delivered to the operator via the USS.

Delete

c. If an operation which requires further coordination has been authorized, the sUAS operator may proceed to operate within the authorized parameters.

Delete

**OLD****12-10-9. FURTHER COORDINATION**

a. Further coordination is the term used when an authorization processed via LAANC cannot be automatically approved. For example, if a Part 107 authorization request is sent by an operator to a USS, and the planned operation is above a UASFM altitude, the request cannot be automatically approved. Facility personnel must be involved in approving or denying the request. The USS can submit the request for further coordination, in which case LAANC will direct it to the appropriate facility, and when a response is provided, LAANC will send it back to the operator.

Add

b. Further coordination requests require longer periods of processing time (e.g., hours, days) than other LAANC processes, based upon the availability of ATC facilities/ATM personnel to consider an authorization request. If a response is not provided, further coordination requests will expire within 30 days after submission or the proposed operator's start time, whichever comes first.

**NOTE-**

LAANC further coordination is not the same as a waiver defined by Part 107 Subpart D. Waivers are not within the scope of LAANC. Furthermore, Part 107 requires a waiver for operations above 400 feet. Therefore, LAANC can only provide Part 107 authorizations, whether automatically or by further coordination, for operations at or below 400 feet.

**12-10-10**

**NEW****12-10-4. FURTHER COORDINATION**

a. Further coordination is the term used when an authorization processed via LAANC cannot be automatically approved. For example, if a Part 107 authorization request is sent by an operator to a USS, and the planned operation is above a UASFM altitude, the request cannot be automatically approved. **Further coordination is available only to Part 107 operators. A safety justification may be optionally submitted by the Part 107 operator for the ATM's consideration.**

**NOTE-**

This Safety Justification is a one-way transmittal from the Part 107 operator that is for use with further coordination requests only. The Safety Justification is not pre-coordinated with the ATM or designee, and is optional information that the Part 107 operator may choose to include to assist the ATM or designee in determining whether to approve or deny the further coordination request.

b. Further coordination requests **in LAANC are not automatic and require the approval of the ATM or designee. If a response is not provided, further coordination requests will expire 24 hours prior to the proposed operator's start time. Facilities are not authorized to engage directly with operators to process further coordination requests.**

**NOTE-**

LAANC does not process Certificates of Authorization (COAs). COAs are processed exclusively in DroneZone in collaboration with the governing Regional Service Center. Any attempt by an operator to submit mitigations or COAs through LAANC will not be accepted.

Renumber as **12-10-5**

**1. PARAGRAPH NUMBER AND TITLE: 18-4-1. TELEPHONE CONFERENCES**

**2. BACKGROUND:** To improve the next day planning process, it is important for ARTCC and TRACON TMUs to participate in next day traffic management planning discussions with the ATCSCC and NAS Stakeholders. The "Plan, Execute, Review, Train, Improve" (PERTI) Webinar is the platform used to accomplish this goal.

**3. CHANGE:**

**OLD****18-4-1. TELEPHONE CONFERENCES****Title through d2(j) NOTE**

Add

**NEW****18-4-1. TELEPHONE CONFERENCES**

No Change

**e. TMOs are responsible for ensuring that ARTCC and TRACON TMUs participate in the “Plan, Execute, Review, Train, Improve” (PERTI) Webinar each day at 2:30 p.m. eastern time.**

**1. PARAGRAPH NUMBER AND TITLE: 18-5-12. DELAY REPORTING**

**2. BACKGROUND:** It has been determined by AJR-1, Director, NAS Operations, that facilities must notify the overlying Air Route Traffic Control Center (ARTCC) Traffic Management Officer (TMO) of delays 45 minutes or greater, except for EDCT delays as a result of a GDP, AFP, or CTOP.

**3. CHANGE:****OLD****18-5-12. DELAY REPORTING****Title through d**

Add

**NEW****18-5-12. DELAY REPORTING**

No Change

**e. Facilities must notify the TMO of the overlying ARTCC, by whatever means available, of delays that reach 45 minutes or greater, except for EDCT delays as a result of a GDP, AFP, or CTOP. TMOs must then notify the Deputy Director Systems Operations (DDSO) and General Manager.**

**1. PARAGRAPH NUMBER AND TITLE: 18-6-14. TMIs OF 25 MIT OR GREATER**

**2. BACKGROUND:** In order to ensure requests of 40 MIT (Miles-In-Trail) and greater receive further evaluation, additional coordination requirements are being added.

**3. CHANGE:****OLD****18-6-14. TMIs OF 25 MIT OR GREATER****Title through c**

Add

**NEW****18-6-14. TMIs OF 25 MIT OR GREATER**

No Change

**d. Any MIT request of 40 MIT or greater requires a conference with the ATCSCC and the requesting facility must advise their General Manager the reason for the restriction request.**

**1. PARAGRAPH NUMBER AND TITLE:** 18–13–4. AIRPORT RESERVATION OFFICE

**2. BACKGROUND:** The Electronic Computer Voice Recognition System (e–CVRS) interface phone number was discontinued.

**3. CHANGE:****OLD****18–13–4. AIRPORT RESERVATION OFFICE**

**Title** through **c**

**d.** Refer to the Web site or touch–tone phone interface below for the current listing of the slot controlled airports, limitations, and reservation procedures.

**NOTE–**

*The Web interface[telephone numbers] to obtain a reservation for unscheduled operations at a slot controlled airport are:*

**1.** *<http://www.fly.faa.gov/ecvrs>.*

**2.** *[Touch–tone: 1–800–875–9694 \(e–CVRS interface\)](tel:1-800-875-9694).*

**3.** *Trouble number: (540) 422–4246.*

**NEW****18–13–4. AIRPORT RESERVATION OFFICE**

No Change

No Change

**NOTE–**

*The Web interface and telephone number to obtain a reservation for unscheduled operations at a slot controlled airport are:*

**1.** *<http://www.fly.faa.gov/ecvrs>.*

**2.** *Trouble number: (540) 422–4246.*

**1. PARAGRAPH NUMBER AND TITLE:**

20–6–4. AIRPORTS WITHIN AIRCRAFT HAZARD AREAS AND TRANSITIONAL HAZARD AREAS

**2. BACKGROUND:** In May 2017, a Safety Risk Management panel evaluated certain space launches in the NAS. As a result of this panel, the Acceptable Level of Risk (ALR) concept was devised, which created requirements for aircraft operations in the vicinity of space launch and reentry operations.

**3. CHANGE:****OLD**

Add

Add

Add

**NEW****20–6–4. AIRPORTS WITHIN AIRCRAFT HAZARD AREAS AND TRANSITIONAL HAZARD AREAS**

**ATC services may not be provided to aircraft at airports that lie within an aircraft hazard area (AHA) or a transitional hazard area (THA) unless real–time start of activity and end of activity notification procedures for space launch and reentry operations are contained in local SOPs or LOAs. There must be sufficient lead–time prior to the start of space launch or reentry operations to allow for departure aircraft to clear the AHA and/or the THA, and to allow arrival aircraft to land and exit the airport movement area. ATC services may resume upon end of activity notification.**

**REFERENCE–**

*Pilot/Controller Glossary Term – Aircraft Hazard Area.*

*Pilot/Controller Glossary Term – Transitional Hazard Area.*

