

CHANGE

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

Air Traffic Organization Policy

**JO 7210.3CC
CHG 2**

Effective Date:
May 19, 2022

SUBJ: Facility Operation and Administration

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 Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.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

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Explanation of Changes

Change 2

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

a. 1–2–4. ABBREVIATIONS

2–1–14. AIRCRAFT IDENTIFICATION PROBLEMS

APPENDIX 2. AIR CARRIER POINTS OF CONTACT FOR AIRCRAFT IDENTIFICATION PROBLEMS

This change replaces Appendix 2 and updates associated processes that now direct facilities to a more frequently updated web address for airline contact numbers. Changes to the list can be provided to the Air Traffic Control System Command Center (ATCSCC) Facility Automation Office via the Traffic Management Officer (TMO) or the Deputy Director of System Operations (DDSO). The abbreviations TMO and DDSO are added to paragraph 1–2–4 Abbreviations, TBL 1–2–1.

b. 2–1–32. REPORTING INOPERATIVE OR MALFUNCTIONING ADS-B TRANSMITTERS

To complement an existing requirement in FAA Order JO 7110.65, this change adds a paragraph to FAA Order JO 7210.3 containing requirements for forwarding controller-reported instances of inoperative or malfunctioning Automatic Dependent Surveillance–Broadcast (ADS–B) transmitters to FAA Flight Standards. This change cancels and incorporates Notice JO 7210.938, which was effective March 1, 2022.

c. 2–1–41. DISPLAYING DEBRIS RESPONSE AREAS ON THE SITUATION DISPLAY

18–4–7. SPACE LAUNCH OR REENTRY VEHICLE MISHAPS

This change adds two paragraphs to FAA Order JO 7210.3 that establish requirements for facilities to have debris response areas (DRA) drawn and ready to be displayed on operational situation displays, and for facility Traffic Management Units (TMUs) to implement traffic management initiatives to mitigate aircraft exposure to falling debris. This change

cancels and incorporates Notice JO 7210.939, which was effective April 19, 2022.

d. 2–3–3. REQUIREMENTS

6–1–2. SECTORS

This change provides revised language to the affected paragraphs, to more clearly define an operational/control position. It also cancels and incorporates Notice JO 7210.935, which was effective December 2, 2021.

e. 3–3–11. HEADSET TONE INCIDENTS APPENDIX 5. CHECKLIST FOR REPORTED HEADSET TONE INCIDENTS

This editorial change updates FAA Order JO 7210.3, Facility Operation and Administration, paragraph 3–3–11, Headset Tone Incidents guidance, and Appendix 5, Checklist for Reported Headset Tone Incidents. All FAA employees must file Injury and Illness Incident Reports (OSHA Form 301) electronically via the Department of Labor’s (DOL) Employees’ Compensation Operations & Management Portal (ECOMP). FAA employees file CA–1/CA–2/CA–7/CA–16 claims forms via ECOMP.

f. 5–1–1. ADVANCE COORDINATION

This change reformats paragraph 5–1–1 and provides other edits for clarity. Outdated language pertaining to responsible parties for air traffic restrictions was updated with reference to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC). New subparagraph c5(d) was relocated from JO 7610.4, paragraph 14–2–1. This change also adds a reference to JO 7610.4, paragraph 14–2–1. This change cancels and incorporates Notice JO 7210.936, which was effective January 20, 2022.

g. 5–4–10. AIRCRAFT CALL SIGNS USED FOR SENSITIVE GOVERNMENT FLIGHTS

This change adds new paragraph 5–4–10 which relocates the procedures for U.S. special call sign inquiries from paragraph 12 of FAA Order JO 7110.67. This change cancels and incorporates

Notice JO 7210.937, which was effective February 21, 2022.

h. 6-7-4. FACILITY MANAGER RESPONSIBILITIES

This change eliminates the term En Route Decision Support Tool (EDST) Hold Annotations Menu, and distinguishes between Hold Data Menu and Hold view, as they represent two different items.

i. 8-2-7. WAIVER TO INTERIM ALTITUDE REQUIREMENTS

This change amends the title of the paragraph to more closely align with other paragraphs in the order that allow for actions taken by facility directive. The change removes the reference to FAA Order JO 7110.65, subparagraph 5-14-3, a3(a), which was inadvertently added to the paragraph in a previous publication. It also removes the specific reference to subparagraph (b) with language allowing for all forms of temporary altitudes to be included in the exemption.

j. 12-10-5. UAS FACILITY MAP (UASFM) DESIGN

This change allows ATC facilities to make and/or request altitude changes to their Unmanned Aircraft Systems Facility Maps (UASFM) utilizing the UASFM web-based tool or the HQ AJV-A UASFM grid altitude value change process. Also, paragraph 12-10-5 is retitled Procedures to Change UAS Facility Map (UASFM) Altitudes.

k. 18-10-4. DEFINITIONS

This change adds Unified Ground Delay Program (UDP) to the Definitions paragraph.

l. APPENDIX 6. COMMERCIAL SPACE LOA SAMPLE TEMPLATES

This change reflects updated language in the letter of agreements to align it with related orders/policy.

m. Editorials

Editorial changes include ensuring the phrase ATC-assigned airspace includes a hyphen and correcting a missing word in subparagraph 18-17-5a3.

n. Entire Publication

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

PAGE CONTROL CHART

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Section 2. Order Use

1-2-1. POLICY

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

1-2-2. ANNOTATIONS

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

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

1-2-3. WORD MEANINGS

As used in this order:

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

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

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

1-2-4. ABBREVIATIONS

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

TBL 1-2-1
Abbreviations

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

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

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

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

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

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

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

Abbreviation	Meaning
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

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. For carriers listed at the following web address, <http://tfms.faa.gov/airlinephones.html>, contact the appropriate airline office.

2. For carriers not listed on the website, contact the operator or the chief pilot of the carrier concerned. Changes to the list can be provided to the ATCSCC Facility Automation Office via the Traffic Management Officer (TMO) or the Deputy Director of System Operations (DDSO).

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 when two or more designated call signs are found to be phonetically similar or difficult to pronounce and are causing a flight identification problem.

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

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

2-1-15. APPROACH CONTROL AIRSPACE

With the advancement of technologies, the air traffic services provided by en route facilities and terminal facilities are becoming more integrated. Terminal airspace should be adjusted to match the services provided. Although en route services are an ARTCC

function, terminal facilities may be expected to provide some en route service. There are some areas in which an ARTCC may not have adequate radar coverage or resources, and in these areas it may be necessary to expand the terminal airspace to provide service. Conversely, at locations with nonradar approach control facilities, en route facilities may have radar coverage, and better service would be provided if some approach control airspace is recalled to the ARTCC. At certain locations, the en route facility may be able to absorb all the airspace of a nonradar approach control. Prior to implementing airspace changes, en route and terminal facility managers must work together to ensure the delegated approach control airspace best meets the needs of the airspace area.

2-1-16. AUTHORIZATION FOR SEPARATION SERVICES BY TOWERS

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

- 1.** A LOA exists with the IFR facility having control jurisdiction which authorizes the separation responsibilities and prescribes the procedures to be used;

- 2.** The agreement has been approved by the Area Director of Terminal Operations; and

- 3.** There is no delegation of airspace to the tower.

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

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

- 1.** The proposed procedures.
- 2.** Operational benefits.
- 3.** Operational impact.

- 4.** Why the IFR facility is unable to provide an equal or superior level of service without the delegation.

- 5.** Improved services to users.

- 6.** Additional radar training.

- 7.** The measures taken to ensure that the local controller's ability to satisfy the FAA's air traffic responsibilities regarding aircraft operating on the runways or within the surface area is not impaired.

- 8.** On-site spares, maintenance support/restoration requirements.

- 9.** Savings and/or additional costs.

- 10.** The number of additional people required.

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

2-1-17. BIRD HAZARDS

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

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

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

NOTE-

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

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

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

FAA Order JO 7110.65, Air Traffic Control, prescribes separation requirements from special use, ATC-assigned airspace, and stationary ALTRVs. In recognition of the fact that prohibited/restricted areas and stationary ALTRVs may be established for

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

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

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

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

1. Explosives detonation.
2. Ground firing of various types.

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

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

e. Restricted airspace with the same number but different letter suffixes are considered to be separate restricted areas. However, treat these types as one restricted area for the purpose of identifying areas for exemption from separation requirements in order to

simplify application of separation minima unless a significant operational advantage can be obtained.

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

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

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

REFERENCE-

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

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

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

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

a. The OS/CIC must report all instances of loss of radio communication, intermittent transponder or transponder/Mode C failure, the inability to security track aircraft, and other unusual IFR/VFR flight information to the Domestic Events Network (DEN) through the appropriate lines of communication. Some examples are, but are not limited to; suspicious activities, deviation from assigned course/altitude, or

other equipment malfunction that may cause an aircraft to operate in an unexpected manner. Relay all known information regarding the aircraft.

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

c. Facility manager must:

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

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

NOTE–

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

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

NOTE–

Airspace sectorization and the workload associated with the normal use of that airspace may degrade the ability of an ATC operation position to provide security services. When this occurs, pilots must be held outside of the security services area in accordance with FAA Order JO 7110.65, paragraph 9–2–1, Aircraft Carrying Dangerous Materials, subparagraph b2.

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

2. Requests for ATC services to VFR aircraft operating within the designated area to enter positive controlled airspace must be issued by the appropriate radar position in accordance with FAA Order

JO 7110.65, Air Traffic Control, and other applicable directives.

e. Adjacent Airport Operations.

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

2. Aircraft departing uncontrolled airports within security areas must be handled using procedures contained in a NOTAM or rule designating the area where ATC security services are required.

2–1–21. AIRPORT TRAFFIC PATTERNS

a. The Service Area Directors of Air Traffic Operations are the focal point to review traffic patterns. Traffic patterns at airports without an operating control tower should be established in accordance with Advisory Circular, AC 90–66, Non-Towered Airport Flight Operations.

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

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

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

b. Ensure that aircraft on the ground do not penetrate marked Obstacle Identification Surfaces,

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 INOPERATIVE OR MALFUNCTIONING ADS-B TRANSMITTERS

FAA Flight Standards Service (AFS), Safety Standards Division is responsible for working with aircraft operators to correct ADS-B malfunctions. Reports of inoperative or malfunctioning ADS-B transmitters must be forwarded to adsbfocusteam@faa.gov and must include the following information:

- a.** The aircraft identification used for the flight;
- b.** Location of the occurrence;
- c.** Date and time of the occurrence (UTC); and
- d.** Any additional information or observations that may be pertinent or helpful to AFS in their investigation.

NOTE–

The intent of this paragraph is to capture ADS–B anomalies observed by ATC, such as errors in the data (other than Call Sign Mis–Match events, which are detected and reported to AFS automatically) or instances when civil ADS–B transmissions would normally be expected but are not received (e.g., ADS–B transmissions were observed on a previous flight leg).

REFERENCE–

FAA Order JO 7210.3, Para 5–4–2, Requests for Deviation from ADS–B Out Requirements.

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

FAA Order JO 7110.65, Para 5–2–22, Inoperative or Malfunctioning ADS–B Transmitter.

FAA Order JO 7110.65, Para 5–2–23, ADS–B Alerts.

FAA Order JO 7110.65, Para 5–2–24, ADS–B Out OFF Operations.

2–1–33. REPORTING SUSPICIOUS UAS ACTIVITIES

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

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

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

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

d. Notify the air traffic manager.

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

1. UTC date and time of incident.

2. Reporting source(s).

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

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

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

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

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

1. Size and color.

2. Number of reported/sighted UAS.

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

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

g. Facilities must maintain a checklist that provides guidance on reporting suspicious UAS activities. At a minimum, this checklist must be available to Operations Supervisor (OS), Controller-in-Charge (CIC), and Operations Manager (OM) personnel. Facilities must consider the following for inclusion on the checklist:

1. Items a through f of this paragraph.

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

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

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

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

REFERENCE–

FAA Order JO 7110.65, Para 2–1–2, Duty Priority.

FAA Order JO 7610.4, Para 7–3–1, Application.
 FAA Order JO 1030.3, Initial Event Response, Chapter 2, Upward Notification.
 FAA Order JO 7210.632, Air Traffic Organization Occurrence Reporting.
 Advisory Circular 91–57B, Exception for Limited Recreational Operations of Unmanned Aircraft.
 P/CG Term – Suspicious UAS.

2–1–34. USE OF UAS DETECTION SYSTEMS

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

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

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

NOTE–

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

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

2–1–35. USE OF COUNTER UNMANNED AIRCRAFT SYSTEMS (C–UAS)

Select Departments and Agencies, which have been legally authorized to use this technology, are operationally using Counter Unmanned Aircraft System systems (C–UAS) in the NAS to protect

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

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

NOTE–

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

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

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

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

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

2–1–36. REPORTING DEATH, ILLNESS, OR OTHER PUBLIC HEALTH RISK ON BOARD AIRCRAFT

a. When an air traffic control facility is advised of a death, illness, and/or other public health risk, the

following information must be forwarded to the DEN:

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

NOTE—

1. *If the ATC facility is not actively monitoring the DEN or does not have a dedicated line to the DEN, they must call into the DEN directly via 844-432-2962 (toll free).*
2. *Except in extraordinary circumstances, such as a situation requiring ATC intervention, follow-on coordination regarding the incident will not involve ATC frequencies.*
3. *The initial report to a U.S. ATC facility may be passed from a prior ATC facility along the route of flight.*

b. Once notification of an in-flight death, illness, and/or other public health risk is provided by an ATC facility, the DEN Air Traffic Security Coordinator must ensure the Centers for Disease Control and Prevention (CDC) Emergency Operations Center (EOC) receives the following information:

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

10. Any request for assistance (for example, a need for emergency medical services to meet aircraft at arrival).

REFERENCE—

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

2-1-37. 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.

2-1-38. 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.

2-1-39. TRANSPORTATION SECURITY ADMINISTRATION AND FAA JOINT OPERATING PROCEDURES

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

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

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

NOTE-

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

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

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

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

2-1-40. DISPLAYING SPACE LAUNCH AND REENTRY AREAS ON THE SITUATION DISPLAY

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

2-1-41. DISPLAYING DEBRIS RESPONSE AREAS ON THE SITUATION DISPLAY

Facility ATMs must develop a means to ensure that, when possible, debris response areas (DRA) are displayable on operational situation displays at the start of a launch or reentry window.

NOTE-

The intent of this requirement is to allow controllers to quickly display a DRA if it is activated. If technical limitations prevent the DRA from being drawn on the operational situation display in advance of a space operation, such as if the DRA would cover an entire sector or facility, then an alternative means of providing the needed geographic area of the DRA to the controller must be used. This could be accomplished using the TSD, a paper map, or some other means.

Section 3. Air Traffic Familiarization/Currency Requirements for En Route/Terminal/System Operations Facilities

2-3-1. GENERAL

a. It is the responsibility of the employees identified in paragraph 2-3-2, Application, to work in conjunction with their supervisors to ensure they adhere to the requirements of this section.

b. Facility managers must develop procedures for tracking and reporting currency for those employees identified in subparagraph 2-3-2b.

2-3-2. APPLICATION

a. Air traffic managers, assistant managers, executive officers, staff managers, operations managers, support managers, traffic management officers and support specialists, who as a condition of employment are not required to maintain currency, must maintain familiarity with control room operations to perform their required duties in an efficient manner.

b. Air traffic control specialists (ATCS), traffic management coordinators (TMC), national traffic management specialists (NTMS), developmental specialists (ATCS/TMC/NTMS), first-level supervisors (including facility managers who also serve as first-level supervisors), operations supervisors (OS), supervisory traffic management coordinators (STMC), national traffic manager officers (NTMO), and air traffic assistants (ATA) are required to meet currency requirements in order to perform their duties.

2-3-3. REQUIREMENTS

a. Familiarization. The methods used for personnel identified in paragraph 2-3-2a, Application, to maintain familiarization must be specified in a local facility directive.

b. Currency. Personnel must rotate through all positions on which they maintain currency each calendar month. Additionally, they must meet the following requirements:

1. Number of positions required to maintain currency.

(a) ATCSs, TMCs, NTMSs, developmental specialists (ATCS/TMC/NTMS) and ATAs must maintain currency on all operational/control positions on which certified.

(b) First-level supervisors (OS, STMC, NTMO) and support specialists (who maintain currency) must maintain currency on a minimum of two operational/control positions.

(c) TMCs/STMCs required to maintain currency on operational positions within the traffic management unit (TMU), and control positions outside the TMU (dual currency), must maintain currency on a minimum of two operational/control positions outside the TMU.

NOTE-

Operational/control positions are: Local and/or Ground (Tower), Satellite Radar, Departure Radar, Arrival Radar and/or Final Radar (TRACON), Radar Position, Radar Associate Position and/or ATOP Position (ARTCC).

2. The following minimum time must be met each calendar month: a minimum of one hour per position is required; time working combined positions satisfies the requirement for each of the combined positions. Time working the assistant controller, flight data, and clearance delivery position is counted for flight service stations (FSS) and air traffic assistants only.

NOTE-

Hand-off, Tracker, CAB/TRACON/NTMS Coordinator, Final Monitor, OS/OSIC, and managerial (in-charge) positions do not have a currency requirement and time spent working those positions is not counted.

(a) ATCSs, Developmental (Dev) ATCSs, and ATAs.

(1) TERMINAL. Radar/tower operational/control positions: A minimum of eight hours tower and eight hours radar. If certified in only one area of operation (tower or radar), a minimum of 16 hours is required.

(2) EN ROUTE, FSS, and ATAs. A minimum of 16 hours on operational/control positions is required.

(b) TMCs, NTMSs, and developmental TMCs/NTMS are required to maintain operational/

control position currency as follows: a minimum of 16 hours on operational/control positions.

(c) Support specialists who maintain currency.

(1) **TERMINAL.** Radar/tower operational/control positions: a minimum of four hours tower and four hours radar. If certified in only one area of operation (tower or radar), a minimum of eight hours is required.

(2) **EN ROUTE/ATCSCC.** A minimum of eight hours on operational/control positions is required.

(d) OSs (including facility managers who also serve as first-level supervisors).

(1) **TERMINAL.** Radar/tower operational/control positions (excluding the OS/OSIC position): a minimum of four hours tower and four hours radar. If certified in only one area of operation (tower or radar), a minimum of eight hours is required.

(2) **EN ROUTE, FSS.** A minimum of eight hours on operational/control positions (excluding managerial (in-charge) positions) is required.

(e) STMCs/NTMOs are required to maintain operational/control position currency as follows: a minimum of eight hours on operational/control positions excluding managerial (in-charge) positions.

(f) **Dual Currency.** TMCs/STMCs at all Air Route Traffic Control Centers (ARTCC) and at New York TRACON (N90), Potomac TRACON (PCT), Northern California TRACON (NCT), and Southern California TRACON (SCT) are required to maintain currency only within the TMU. All other TMCs/STMCs are required to maintain dual currency.

(1) **TERMINAL.** Radar/tower operational/control positions: a minimum of four hours tower and four hours radar. If certified in only one area of operation (tower or radar), a minimum of 8 hours is required.

(2) **EN ROUTE.** A minimum of eight hours on operational/control positions is required.

(3) **TMC/STMC optional.** Staffing and workload permitting, TMCs/STMCs not required to maintain dual currency may elect to maintain dual currency. Dual currency is not subject to the provisions of paragraph 2–3–4; Differential.

(g) **Airport Surveillance Radar (ASR)** approaches (where published): three each calendar quarter, one of which must be a no-gyro. Radar simulation may be used to satisfy these requirements.

3. Time spent performing on-the-job-training (OJT) instruction as an OJT instructor is not counted toward operational/control position currency.

4. Time spent receiving OJT on combined positions, where the employee is certified on some of the combined positions, is not counted toward operational/control position currency.

5. Time spent performing certification skills checks, operational skills assessments, skills checks, over-the-shoulders, etc., is not counted toward operational/control position currency.

NOTE–

Initial operational/control position certification completed in a month meets the requirements for that position for that month. Individuals recertified in a month must meet currency requirements for that month regardless of the day of recertification.

TBL 2–3–1

Currency Requirements

Position	Operational/ Control Position Currency	Total Minimum Currency Requirements
ATCS/Developmental ATCSTMC/ Developmental TMC FSS Specialist/Dev FSS Spec NTMS/Dev NTMS/ATA	Min 16 hours/month Min 1 hr per position	16 hours
Support Specialist (if maintaining currency)	Min 8 hours/month Min 1 hr per position Min 2 positions	8 hours
OS STMC/NTMO FSS OS	Min 8 hours/month Min 1 hr per position Min 2 positions	8 hours
TMC - Dual Currency	Within TMU: Min 16 hours/month Min 1 hr per position Outside TMU: Min 8 hours/month Min 1 hr per position Min 2 positions	24 hours
STMC – Dual Currency	Within TMU: Min 8 hours/month Min 1 hr per position Min 2 positions Outside TMU: Min 8 hours/month Min 1 hr per position Min 2 positions	16 hours

Section 7. Appearance and Security

2-7-1. PERSONNEL APPEARANCE

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

2-7-2. QUARTERS APPEARANCE

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

2-7-3. BULLETIN BOARDS

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

2-7-4. FOOD AND BEVERAGES

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

2-7-5. FACILITY SECURITY

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

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

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

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

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

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

NOTE-

Procedures for reporting other suspicious activities or security events are located in JO 7210.3, paragraphs 2-1-30, Reporting Suspicious Aircraft/Pilot Activities; 2-1-33, Reporting Suspicious UAS Activities; 2-1-39, Transportation Security Administration and FAA Joint Operating Procedures; and 2-7-7, Cooperation with Law Enforcement Agencies.

2-7-7. COOPERATION WITH LAW ENFORCEMENT AGENCIES

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

REFERENCE-

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

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

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

2-7-8. FACILITY VISITORS

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

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

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

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

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

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

3-3-8. VSCS FREQUENCY BACKUP

a. Assign each “Radar Associate” position the identical frequencies as the “Radar” position except where precluded by system hardware/software limitations or facility needs.

b. If the conditions of paragraph a cannot be met, the frequencies needed to control each sector must be available at another position. This level of redundancy assures all A/G frequencies can readily be covered in the case of VCE outage.

3-3-9. VSCS RECONFIGURATIONS

a. Air traffic VSCS positions listed as “released to maintenance” must not be reconfigured unless prior approval has been received from Technical Operations.

b. When approval has been obtained and the reconfiguration action has been completed, return the previously released position to Technical Operations and continue to list the position as “released to maintenance,” or as directed by Technical Operations.

NOTE-

During the period that the VSCS position is listed as “released to maintenance,” this procedure must be utilized whenever a reconfiguration to the position is required.

3-3-10. VTABS (VSCS TRAINING AND BACKUP SYSTEM)

a. Facility air traffic managers must ensure that local procedures are developed which will accommodate switching from VSCS to a VTABS operation. These procedures must include, but not be limited to:

1. Controllers must, in the event that VSCS air/ground communications capabilities are lost, notify the operational supervisor and attempt to access all air/ground resources through the VSCS via Main, Standby, and BUEC.

2. The operational supervisor must notify the operations manager-in-charge (OMIC) and consider combining sectors within the area before going to a VTABS operation. The VTABS system is designed wherein the entire facility must be switched over to VTABS. Consider all alternatives before making the

transition to VTABS. If these resources are unsuccessful, the OMIC must coordinate with the NOM to transition to VTABS.

3. Operational supervisors must ensure the VTABS sector map configurations are appropriate for the operation.

4. Controllers must verify the appropriate VTABS frequency mode; i.e., main, standby, or BUEC, for their operating position, since the VTABS frequency selection will be in the same mode as when it was last used.

b. When a catastrophic loss of VSCS occurs and transfer to a VTABS configuration becomes necessary, the OMIC must assure that the procedures established in paragraph 2-1-7, Air Traffic Service During Planned and Unplanned Outages, are adhered to.

3-3-11. HEADSET TONE INCIDENTS

FAA Contract Towers (FCT) NOT APPLICABLE.

a. Facility air traffic managers will ensure that reported headset tones are documented, the Safety Management Information System (SMIS) is updated, and affected equipment tested. Headset tone incidents must be handled in accordance with Appendix 5, Checklist for Reported Headset Tone Incidents.

b. If an employee wishes to file a claim due to a headset tone, the OS/CIC will ensure reporting is done in accordance with FAA Order 3900.19, Chapter 3, Recording and Reporting Occupational Injuries and Illnesses.

NOTE-

1. *Headset tone incidents are automatically reported to the Environmental and Occupational Safety and Health (EOSH) Safety and Environmental Compliance Manager (SECM) through the SMIS.*

2. *All FAA employees must file Injury and Illness Incident Reports (OSHA Form 301) electronically via the Department of Labor’s (DOL) Employees’ Compensation Operations & Management Portal (ECOMP). FAA employees file CA-1/CA-2/CA-7/CA-16 claims forms via ECOMP.*

REFERENCE-

FAA Order 3900.19, Federal Aviation Administration (FAA) Occupational Safety and Health (OSH) Policy.

3-3-12. USE OF CORDLESS HEADSETS IN OPERATIONAL AREAS

a. Plantronics cordless headsets, model CA12CD, may be used in operational areas by positions that require only monitoring of operations and/or to affect landline communications. These positions include: Operations Manager-in-Charge (OMIC), Operational Supervisor-in-Charge (OSIC), Operations Supervisor (OS), Controller-in-Charge (CIC), Traffic Management Coordinator (TMC), and Coordinators.

b. Cordless headsets are not authorized for use in two-way communications with aircraft or for any other function that includes over-the-air broadcasting.

c. Air Traffic Managers must ensure operational personnel who use cordless headsets are trained on the use, application, and limitations of the CA12CD prior to operational use.

d. ATC facilities must not use more than 30 cordless headsets. Co-located facilities (control rooms within 150 feet) must not use more than 30 cordless headsets, combined.

1. Under ideal conditions, the maximum useable range between the base station and cordless headset is 100 feet (Multiple users may reduce the effective range of the headsets).

2. Base stations must be separated by at least 3 feet from each other.

e. Use of cordless headsets during the conduct of a performance or certification skill check must be done in accordance with the provisions of direct monitoring.

REFERENCE-

FAA Order JO 3120.4, Air Traffic Technical Training.

f. Cordless headsets that cause or receive interference must be immediately removed from service. Where applicable, FAA Technical Operations must be informed of the actual or suspected interference.

Section 3. Letters of Agreement (LOA)

4-3-1. LETTERS OF AGREEMENT

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

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

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

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

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

NOTE-

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

REFERENCE-

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

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

f. Establish responsibilities for:

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

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

4. Reporting operating limitations and hazards.

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

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

REFERENCE-

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

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

i. Describe airspace areas required to segregate special operations.

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

k. Define the responsibilities of the tower and the airport management or other authority for movement and nonmovement areas by precisely delineating the loading ramps and parking areas under the jurisdiction of the airport management or other appropriate authority. Facility air traffic managers may, at their discretion, exclude from the movement area those portions of the airport surface normally designated movement areas that are not visible from

the tower. Consideration must be given to the impact this may have on the movement of ground traffic. The agreement may include the following:

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

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

3. At those airports where vehicles not equipped with two-way radio are permitted by the airport management or other appropriate authority to enter or cross the defined movement area at specific locations without approval from the tower, enter into an LOA with the airport management, or other appropriate authority, specifying the conditions for such operations and include the clause as follows: "The airport owner/operator covenants and expressly agrees that with regard to any liability which may arise from the operation within (area/areas), that party must be solely and exclusively liable for the negligence of its own agents, servants, and/or employees, in accordance with applicable law, and that neither party looks to the other to save or hold it harmless for the consequences of any negligence on the part of one of its own agents, servants, and/or employees."

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

4-3-2. APPROPRIATE SUBJECTS

Examples of subjects of LOAs are:

- a.** Between ARTCCs:
 - 1.** Radar handoff procedures.
 - 2.** Interfacility coordination procedures.
 - 3.** Delegation of responsibility for IFR control jurisdiction.
- b.** Between ATCTs:
 - 1.** Tower en route control service.
 - 2.** Interfacility coordination procedures.
- c.** Between Flight Service Stations: Procedures for maintaining master flight plan files.
- d.** Between an ARTCC and an ATCT:
 - 1.** Approach control service.
 - 2.** Interfacility coordination procedures.
 - 3.** Tower/center en route control service.
- e.** Between an ARTCC and an FSS: Procedures for the assignment of DVFR and VFR beacon codes.
- f.** Between an ATCT and an FSS: Operation of airport lighting.
- g.** Between an ARTCC or an approach control facility and a nonapproach control tower, an FSS, an airport manager, or a local operator: Special VFR Operations. (See FIG 4-3-1.)
- h.** Between an ARTCC or an approach control facility and a nonapproach control tower:
 - 1.** Authorization for separation services.
 - 2.** Interfacility coordination procedures.
 - 3.** Opposite direction operations procedures.

REFERENCE-

FAA Order 7210.3, Para 2-1-37, Opposite Direction Operations.

- i.** Between an ARTCC and another government agency:
 - 1.** Interfacility coordination for control of ADC aircraft.
 - 2.** Delegation of responsibility for approach control services.
 - 3.** MTR procedures.
- j.** Between a tower and another government agency:
 - 1.** Simulated flameout procedures.
 - 2.** Control of helicopter SVFR flights.

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; margin: 10px 0;"> LETTER OF AGREEMENT EFFECTIVE: _____ </div> SUBJECT: Interfacility Coordination for the Control of Aerospace Defense Command Interceptor Aircraft 1. PURPOSE: (List responsibility and describe necessary coordination.) 2. CANCELLATION: (As required.) 3. SCOPE: (Specify area, names, and types of facilities involved.) 4. RESPONSIBILITIES: (Specify.) 5. PROCEDURES: <div style="margin-left: 20px;"> 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.) b. Transfer of Control. (Specify transfer procedures.) 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.) 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.) e. Arrivals. (Outline handoff procedures and special instructions.) f. General. (Self-explanatory.) </div> 6. ATTACHMENTS (List, as required, items such as chart of ATC–assigned airspace areas, common reference/handoff points, etc.)
Air Traffic Manager, (Name) ARTCC
Commander, (Name) Air Division
(Title of other appropriate authority)

4-3-9. AUTOMATED INFORMATION TRANSFER (AIT)

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

REFERENCE–

FAA Order JO 7110.65, Para 5-4-11, En Route Fourth Line Data Block Usage.

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

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

1. Transfer of radar identification only:

EXAMPLE–

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

enters controller C's airspace. Controller A transfers aircraft communications to controller C before the aircraft enters controller C's airspace and after observing that controller C has accepted the transfer of radar identification.

2. Transfer of radar identification and altitude control:

EXAMPLE–

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

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

3. The following is an example of a precoordinated AIT procedure which might be written in a facility directive:

EXAMPLE–

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

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

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

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

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

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

c. Due to system design, the transfer of data stored in the fourth line of the ERAM FDB will not be displayed to the controller when operating on the backup system in EBUS only mode.

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

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

3. After successfully completing the transition back to the primary system, coordinate a time to enable interfacility ERAM fourth line data transfer.

4. The air traffic manager must ensure that these procedures are incorporated into a Standard Operating Procedure.

Chapter 5. Special Flight Handling

Section 1. Presidential Aircraft

5-1-1. ADVANCE COORDINATION

NOTE-

Presidential aircraft and entourage, referred to herein, include aircraft and entourage of the President, the Vice President, or other public figures designated by the White House. These parties may also be referred to as very important persons (VIP).

a. An advance survey group comprised of representatives of the Office of the Military Assistant to the President, the U.S. Secret Service (USSS), the White House Staff, and a Presidential Advance Agent may visit each ATC facility the Presidential aircraft will transit. The visit is normally made several days in advance of the trip to determine security aspects and the availability of supporting services. On this visit the group may meet with the airport operator, the air traffic manager (ATM), and other interested parties. Based on the evaluation by this group, a decision is made on the use of the airport, and further coordination is planned for the advance group as described in subparagraph b.

b. The advance group, comprised of representatives of the same organizations stated in subparagraph a, will meet with the same airport elements to complete security measures and supporting services and determine the necessary restrictions to air traffic operations before the arrival and the departure of the Presidential aircraft and while the Presidential entourage is on the airport. The security provisions may include stationing a guard in the tower cab or at the tower entrance and maintaining two-way communications between the control tower and agents on the ground. This meeting will be held several days in advance of the planned arrival of the Presidential aircraft. The advance group has been requested to have all elements of the group coordinate with the FAA simultaneously.

c. In addition to the responsibilities described in this paragraph, additional advance coordination requirements and information are located in JO 7610.4. Responsibilities include the following:

REFERENCE-

FAA Order JO 7610.4, Para 14-2-1, Advance Coordination.

1. The ATM must appoint an air traffic supervisor to serve as coordinator who will be responsible for attending all meetings and briefing all affected personnel. Additionally, the coordinator must brief the ATCSCC, the appropriate ARTCC, and other affected ATC facilities within their jurisdiction of any traffic delays or restrictions.

2. All advance coordination must be documented, with special attention given to routes, radio frequencies, and assigned transponder codes. This documentation must be made available to the personnel on duty who will be handling the Presidential movement.

3. The meeting must be attended by the ATM, the coordinator, and, if available, the supervisory specialist(s) who will be on duty and directly involved in the control of airport traffic during the arrival and departure, and while the Presidential entourage is on the airport.

4. The ATM must take whatever steps are necessary to ensure that the Presidential flight, Presidential support aircraft, and entourage are given priority. Restrictions will be placed upon normal air traffic operations to provide priority unless directed otherwise by the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC). Air traffic personnel must be guided by the determinations of the advance group and must cooperate to the maximum extent possible.

5. The ATM must also consider the following measures:

(a) Employing air traffic control techniques to temporarily adjust (e.g., change runway configurations) or suspend the movement of traffic to accommodate the arrival and departure of the Presidential aircraft, and while the Presidential entourage is on the airport.

(b) Requesting traffic, by NOTAM (separate from the TFR NOTAM), to voluntarily conform to restrictions in the vicinity of an airport. The NOTAM must give the approximate time of the restrictions and should be cleared by the advance group. It must avoid

any reference to presidential activities and must be issued at least 8 hours in advance.

EXAMPLE–

ALL TRAFFIC CAN EXPECT DELAYS FROM (date/time) TO (date/time) AND FROM (date/time) TO (date/time).

(c) The time will normally be 15 minutes before to 15 minutes after the arrival and the departure time.

(d) Advising airport management to ask aircraft operators to consider pre-positioning to other airports outside of the TFR area while the TFR is in effect in order to reduce the economic or other adverse impacts to those operators.

d. If the advance group determines that mandatory airspace restrictions are required, the Washington headquarters office of the U.S. Government agency responsible for the protection of the personage concerned will contact FAA Headquarters in accordance with established procedures and request the necessary regulatory action. The air traffic manager must advise the Service Area office of the regulatory proposal. (See 14 CFR Section 91.141 and FAA Order JO 7610.4, Special Operations.)

NOTE–

The actions established herein do not affect the provisions of 14 CFR Section 91.113(b); i.e., an aircraft in distress has the right-of-way over all other air traffic.

REFERENCE–

FAA Order 7930.2, Para 7–1–1, FDC NOTAM Categories.

e. To ensure radio communications and radar service, the following should be coordinated with the advance group:

1. All aircraft in the flight should be assigned a discrete transponder code. As a minimum, the lead aircraft and the aircraft containing the President should turn their transponders on when flying in formation. In the event of a formation breakup, all aircraft should squawk their assigned code to facilitate auto-acquire.

2. Normal frequencies are preferred over discrete frequencies.

NOTE–

Secret Service personnel will transmit progress reports on the Presidential entourage to the affected tower as soon as possible.

f. Prior to the actual operation, action must be taken to ensure that all air traffic specialists who will be on duty during the arrival and departure of the Presidential aircraft are thoroughly briefed concerning the arrangements pertaining to the operation, including movements of the Presidential entourage while on the airport.

g. At military airports, the base commander will determine the restriction or delay of flight operations into that airport and the need to issue a NOTAM. He/she should coordinate his/her actions with the appropriate FAA facilities if air traffic will be affected.

5–1–2. THE PRESIDENT, VICE PRESIDENT, AND EXEC1F AIRCRAFT MONITORING

a. Advance scheduled movement information of the President, Vice President, and Executive One Foxtrot (EXEC1F) aircraft received from the White House must be distributed to the air traffic manager of each facility through which these aircraft will transit.

b. The ATM will be notified of the scheduled movement of the President, Vice President, or EXEC1F aircraft by the appropriate service center office or, when time critical, by national headquarters through the ATCSCC or the DEN.

c. The President, Vice President, and EXEC1F aircraft must be aurally and visually monitored by a supervisory specialist/controller-in-charge (CIC) from departure to arrival as follows:

1. The ATM of each facility through which the President transits must ensure that a supervisory specialist/CIC aurally and visually monitors the aircraft while in the facility's airspace.

2. The ATM of each facility through which the Vice President and EXEC1F aircraft transits must ensure that a supervisory specialist/CIC aurally and visually monitors the aircraft while in the facility's airspace where sufficient on-duty staffing allows.

d. The supervisory specialist/CIC must:

1. Be present at each sector/position providing ATC service to the President, Vice President, and EXEC1F aircraft from the flight's entry in the facility's airspace until the flight exits the facility's airspace.

2. Aurally and visually monitor these flights to ensure that separation, control, and coordination are accomplished.

NOTE—

Supervisors and managers at FAA Contract Towers (FCT) are qualified to perform the duties required in paragraph 5-1-2.

5-1-3. USE OF FAA COMMUNICATIONS CIRCUITS

Operations personnel must expedite the movement of Presidential aircraft and related control messages when traffic conditions and communications facilities permit. Honor any request of the pilot concerning movement of the aircraft if the request can be fulfilled in accordance with existing control procedures. Also, honor any request of the pilot, Office of the Vice President, Secret Service, or White House Staff for the relay, via FAA communications circuits, of information regarding the movement or proposed movement of the aircraft.

5-1-4. SECURITY OF INFORMATION

FAA personnel must not release any information concerning Presidential flights to anyone outside the FAA except properly identified White House staff members, Secret Service personnel, or appropriate military authorities. Any inquiries from the press or others for information regarding the movement of these aircraft must be referred to the White House, the Secret Service, the Air Force, or their representatives at either the point of departure or arrival. These

security measures also apply to information regarding the movement of Presidential or Vice Presidential family aircraft.

5-1-5. MOVEMENT INFORMATION

Honor any request of the pilot concerning movement of the Presidential aircraft if it can be fulfilled in accordance with existing control procedures. Also, honor any request of the pilot, Secret Service, White House Staff, or Office of the Vice President for the relay, via FAA communications circuits or Defense Switching Network (DSN), of information regarding the movement or the proposed movement of these aircraft.

5-1-6. COORDINATION

ARTCCs must call CARF direct for ALTRV approval on any Presidential aircraft international flight plan received less than 4 hours before departure.

5-1-7. RESCUE SUPPORT AIRCRAFT

When rescue support aircraft are used, the aircraft will depart from various bases and will file flight plans which will place the aircraft on tracks in proximity of the Presidential aircraft for contingency purposes. Orbits may also be used by the rescue support aircraft. These aircraft will be identified in the remarks section of the flight plan as “Rescue” for purposes of radio and interphone communications.

REFERENCE—

FAA Order JO 7110.65, Para 2-4-20, Aircraft Identification.

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.

5-4-10. AIRCRAFT CALL SIGNS USED FOR SENSITIVE GOVERNMENT FLIGHTS

a. ATO System Operations Security assigns and authorizes U.S. special call signs and beacon codes for flights used by federal (non-DOD), state, local, tribal, and territorial government agencies for the specific purpose of conducting sensitive operations in the NAS, such as law enforcement and surveillance missions. These call signs and beacon codes are not published for security reasons.

NOTE-

This paragraph is not applicable to military call signs, which are a responsibility of the DoD.

b. ATC may contact the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC) for immediate issues regarding a particular U.S. special call sign or beacon code used by an aircraft for a sensitive mission.

NOTE–

The DEN ATSC may not possess knowledge of a specific mission.

c. Non-urgent issues regarding the use of U.S. special call signs can be addressed to ATO System Operations Security via email at 9-ATOR-HQ-IFOS@faa.gov.

REFERENCE–

FAA Order JO 7110.67, Air Traffic Management Security Services for Special Operations.

Part 2. AIR ROUTE TRAFFIC CONTROL CENTERS

Chapter 6. En Route Operations and Services

Section 1. General

6-1-1. AREAS OF OPERATION

The control room is divided into easily managed segments or areas of operation. An area of operation consists of a group of sectors requiring the service of ATCSs. The number of areas authorized is based on the ARTCC's requirements and staffing needs. Vice President of En Route and Oceanic Services approval must be obtained prior to changing the number of areas of operation.

6-1-2. SECTORS

The basic unit in each area of operation is the sector. Sectors are classified as one Radar and one Radar Associate, or one ATOP Position.

6-1-3. SECTOR CONFIGURATION

a. The size and configuration of sectors are determined by:

1. Traffic volume.
2. Traffic flow.
3. Types of aircraft.
4. Location and activity of terminals.
5. Special operations/procedures.
6. Coordination requirements.
7. Consolidation capability.
8. Radar/radio coverage.
9. Equipment limitations.
10. Airway alignments.

b. Accordingly:

1. Align sector boundaries so as to contain the longest possible segments of airways.

2. Align sector consoles to conform with the primary traffic flow.

3. Distribute the workload equitably among the sectors.

4. Provide for a sector consolidation capability.

c. The lateral boundaries of sectors in different altitude strata need not coincide.

d. A LOA must be prepared when adjacent sectors of two facilities are stratified at different levels.

6-1-4. AREAS OF SPECIALIZATION

ARTCC air traffic managers must divide their control rooms into areas of specialization as sector complexity dictates. ATCSs must be assigned to one or more areas of specialization commensurate with individual qualifications. An area of specialization is a group of interrelated sectors on which an ATCS is required to maintain currency. ARTCC air traffic managers should strive to make areas of specialization coincident with areas of operation. There may be more than one area of specialization in an area of operation. Avoid, if possible, establishing an area of specialization encompassing portions of two areas of operation. The En Route and Oceanic Service Area Office should be notified of changes affecting the number and type of areas of specialization.

6-1-5. OPERATING POSITION DESIGNATORS

a. The following designators may be used to identify operating positions in an ARTCC: (See TBL 6-1-1).

TBL 6-1-1
Operating Position Designators

	<i>Designator</i>	<i>Position</i>
1.	A	Developmental Controller
2.	C	Coordinator
3.	D	Sector Controller
4.	DR	Radio Controller
5.	DSC	Data Systems Coordinator
6.	ERM	ERM Route Metering
7.	FDCS	Flight Data Communications Specialist
8.	M	AMIS Controller
9.	MC	Mission Coordinator
10.	OM	Operations Manager
11.	OS	Operations Supervisor
12.	R	Radar Controller
13.	RH	Radar Handoff
14.	SDCS	Supervisory Data Communications Specialist
15.	STMCIC	Supervisory Traffic Management Coordinator-in-Charge
16.	TMC	Traffic Management Coordinator
17.	WC	Weather Coordinator

b. Facility air traffic managers may use designators other than those listed to accommodate local situations.

6-1-6. FLIGHT PROGRESS STRIP USAGE

Air traffic managers may authorize optional strip marking at specific sectors provided all of the following are met:

a. The sector/position is using an automated system with System Analysis Recording (SAR) capabilities;

b. Computer generated flight progress strips are being posted;

c. Radio and interphone transmissions are being recorded;

d. Control instructions or coordination not recorded on a voice recorder must be documented on the flight progress strip;

e. Standard strip marking procedures are used until the aircraft is in radar contact, the hand-off has been accepted and direct radio communications has been established, except where automated, electronic strips or equivalent are in use (e.g., ATOP);

f. The members of the radar team concur and ensure no misunderstanding or duplication of workload will exist;

NOTE-

Posting control information onto the flight progress strip serves as an important nonverbal communications tool between members of the control team.

g. Authorized sectors and local optional strip marking procedures are documented in a facility directive;

h. Standard strip marking procedures must be used for aircraft requiring special handling, such as, emergency, holding, etc.; and

i. When training is being conducted at the sector, standard strip marking procedures must be used.

6-1-7. DISPLAY OF TIME-BASED FLOW MANAGEMENT (TBFM) INFORMATION

Configure the situation display to display TBFM schedule information when metering is active.

Section 2. Sector Information Binders

6-2-1. EN ROUTE OR OCEANIC CONTROLLER TEAM CONCEPT

There are no absolute divisions of responsibilities regarding position operations. The tasks to be completed remain the same whether one, two, or three people are working positions within a facility/sector. The team, as a whole, has the responsibility for the safe and efficient operation of that facility/sector.

6-2-2. EN ROUTE SECTOR INFORMATION BINDER

The en route sector information outline is to be used for guidance in developing facility sector binders for each sector of operation. The pertinent items in subparagraph a thru subparagraph e below must be incorporated into each sector binder. The format of the binder must be determined by the air traffic manager and must contain all information necessary for the safe and efficient operation of each sector. A sector specific binder is required for each operational sector and is to be in a location easily accessible by each position/sector.

a. Sector Narrative: General description of normal traffic flows and adjacent sector/facility coordination and potential trouble spots.

b. Assignment of airspace:

1. Delegation of Approach Control airspace.
2. Sectors normally combined.

EXAMPLE-

Which sector assumes responsibility when combined or which sector assumes responsibility for approach control airspace.

3. Military airspace delegation.

c. Sector Information.

1. Frequency Information.

(a) Primary frequency.

(b) Back-up frequency.

(c) Primary and back-up frequency remote communications air-ground facility (RCAG).

(d) Back-up emergency communication (BUEC) operation priorities.

(e) Position location.

(f) Location of emergency frequencies and RCAG.

(g) Special Use frequencies and RCAG.

2. Indirect access (IA) dial codes.

3. Sector Description (map, video map, and/or narrative).

(a) Lateral limits.

(b) Vertical limits.

4. Specify unique sector equipment configurations.

d. Sector Procedures.

1. Sector specific directives.

2. LOAs or LOA procedures applicable to that sector.

3. Areas of limited radio/radar coverage.

4. Mandatory speed restrictions.

5. Mandatory heading requirements.

6. Mandatory altitude requirements.

7. Sector handoff/point out procedures if different from requirements of FAA Order JO 7110.65, Air Traffic Control, Chapter 5, Section 4, Transfer of Radar Identification.

8. Transfer of control points other than airspace boundaries.

9. Radar arrival routes and restrictions for airports within facility/sector jurisdiction.

10. Normally used sector holding fixes to include published/unpublished hold, allowable altitudes, maximum speed, maximum length, direction of turn, direction from fix, and if applicable, published procedures involved.

11. Special strip or flight data requirements of sector.

12. Authorized jump areas in Class A airspace within area of jurisdiction.

13. Special routes for dangerous cargo or inert devices flights in area of jurisdiction.

14. Sensitive/classified activities to be avoided by special interest flights.

15. IFR Military Training Routes (IR) in area of jurisdiction.

16. Aerial refueling routes, including air refueling initial point (ARIP), air refueling control point (ARCP), and egress fix(es).

17. Special use and ATC–assigned airspace within area of jurisdiction.

e. Flight Data Requirements.

1. Primary and back–up printers.

2. Alternative methods for relaying/requesting information.

3. Data that requires expeditious handling including, flight plan data, weather information, traffic management messages, and miscellaneous data.

4. Specify flight progress strips to be posted and the location to place them.

5. Sources to obtain weather information.

6. Sources and data required for display in SIAs.

Section 7. En Route Decision Support Tool (EDST)

6-7-1. GENERAL

EDST is used by the sector team in performing its strategic planning responsibilities. EDST uses flight plan data, forecast winds, aircraft performance characteristics, and track data to derive expected aircraft trajectories, and to predict conflicts between aircraft and between aircraft and special use or designated airspace. It also provides trial planning and enhanced flight data management capabilities.

6-7-2. OPERATIONS SUPERVISOR-IN-CHARGE RESPONSIBILITIES

a. Where authorized, perform EDST data entries to keep the activation status of designated Airspace Configuration Elements current.

b. Ensure that the EDST Airspace Status Display information accurately reflects current Special Activity Airspace (SAA) status.

c. Perform coordination and designated actions in the event of an EDST outage or degradation, in accordance with the requirements of this order and as designated by facility directive.

d. Assist in sector preparations needed to transition to and from EDST operations.

e. Ensure changes to restrictions based on the Restrictions Inventory and Evaluation are implemented in a timely manner.

6-7-3. OPERATIONS MANAGER-IN-CHARGE RESPONSIBILITIES

a. Ensure that the EDST Airspace Status Display information accurately reflects current SAA status.

b. Perform coordination and designated actions in the event of an EDST outage or degradation, in accordance with the requirements of this order and as designated by facility directive.

c. Ensure changes to restrictions based on the Restrictions Inventory and Evaluation are implemented in a timely manner.

6-7-4. FACILITY MANAGER RESPONSIBILITIES

a. Ensure LOAs, SOPs, and Sector Position Binders are current to support EDST.

1. Facility managers must consider EDST functions and limitations in reviewing all current LOAs and/or negotiating all future LOAs.

2. The following items should be considered when reviewing LOAs:

(a) Interfacility coordination procedures.

(b) Special Activity Airspace (SAA) use and status.

(c) Restriction relaxation/removal.

(d) Outage notification.

(e) Degradation of functions notification.

(f) Automated Information Transfer (AIT) procedures.

b. Ensure all facility directives are current to support EDST. Directives must include, but are not limited to:

1. Outages.

2. Airspace Configuration Elements Data Entry.

3. Standard Use of Automated Flight Data Management.

4. Sectors authorized to use Inappropriate Altitude for Direction of Flight (IAFDOF) Manual Mode..

5. Sectors authorized to use the Drop Track Delete function and the conditions under which it may be used.

6. Conditions under which a controller can deactivate an adapted EDST restriction.

7. Local requirements for posting flight progress strips that exceed national requirements.

8. Facility standard for annotating status of manual coordination at sectors where automated coordination with an external facility is not available (e.g., international facility, VFR tower). Facility directives may require either the use of the

Coordination Menu or flight progress strips, and must define a standard for each sector.

9. Facility standard for annotating hold instructions and reporting delay information at sectors. Facility directives may require either the use of the ERAM Hold Data Menu, ERAM Hold view, flight progress strips, or a facility-approved worksheet, and must define a standard for each sector.

c. Ensure the Restrictions Inventory and Evaluation is conducted and maintained in accordance with this order.

d. Ensure changes to restrictions based on the Restrictions Inventory and Evaluation are implemented in a timely manner.

6-7-5. EDST AIRSPACE CONFIGURATION ELEMENTS

a. Airspace Configuration Elements are:

1. Special Activity Airspace (SAA).
2. Airport Stream Filters (ASF).
3. Adapted restrictions.

b. For each EDST adapted airspace configuration element, facility directives must designate at least one primary position and one secondary position to be responsible to update the status (e.g., active/inactive) and/or the activation schedule for that element.

NOTE-

1. *Accurate conflict probe results require timely updates to the current activation status and/or the projected activation schedule for airspace configuration elements.*

2. *Designating a position to have secondary responsibility for each EDST Airspace Configuration Element is essential to maintain the capability to perform updates in the event that equipment at the primary position is temporarily out of service.*

3. *Positions to be considered for primary or secondary designation include a specified sector, TMU, or operations supervisor.*

c. ATC positions and personnel authorized by facility directive must perform automation entries in a timely manner to update the status of SAAs, restrictions, and ASF.

d. For an EDST airspace configuration element that is associated with a particular sector or sectors and whose status is highly dynamic in nature:

1. The designated sector(s) should be assigned the primary responsibility to keep the EDST status current.

2. The TMU or the appropriate operations supervisor should be assigned the secondary responsibility to keep EDST status current.

6-7-6. STANDARD USE OF AUTOMATED FLIGHT DATA MANAGEMENT

Use of the checkbox flight data management feature of EDST must be standardized in accordance with individual facility directives.

6-7-7. EDST OUTAGES

a. In accordance with Chapter 8, NAS En Route Automation, and the requirements in this chapter, facilities must develop and maintain procedures for transition to and from EDST operations.

NOTE-

The back-up for EDST is flight progress strips.

b. Planned EDST Outages.

1. Schedule preventive or periodic maintenance of EDST to coincide with periods of low air traffic volume.

2. Notification of planned local EDST outages must be coordinated with the Operations Manager no less than 2 hours in advance.

3. The Operations Manager must notify the adjacent EDST facilities of a planned outage no less than 1 hour in advance.

4. The Operations Manager must notify Operations Supervisors of a planned EDST outage as soon as known.

5. Each Operations Supervisor must notify the sector teams in their area of a planned EDST outage as soon as known.

6. At least 20 minutes prior to a local EDST outage, Operations Supervisors must ensure that sectors resume posting and maintenance of flight progress strips, in accordance with FAA Order JO 7110.65, Air Traffic Control, requirements for a non-EDST environment, except as otherwise permitted by facility directive.

c. Unplanned EDST Outages.

1. A facility directive must include a checklist detailing actions to be taken and roles and responsibilities during an unplanned EDST outage.

Section 2. Procedures

8-2-1. THREE MILE OPERATIONS

Facilities may adapt airspace to permit the use of 3 NM separation as defined in FAA Order JO 7110.65, Air Traffic Control, subparagraph 5-5-4c, subparagraph 5-5-4d, or subparagraph 5-5-4e, provided all of the following are met:

- a. An operational advantage will be obtained. Consideration must be given to such aspects as terminal interface, radar reliability, etc.
- b. Facility directives are issued to:
 - 1. Define the 3 NM separation area.
 - 2. Permit 3 NM separation in the defined area.
 - 3. Accommodate local procedural changes.
- c. ERAM:
 - 1. The 3 NM separation area is displayable on the video map.
 - 2. The aircraft alert volume is adapted for 3 NM separation.
 - 3. Within 40 NM of the preferred radar; or
 - 4. Within 60 NM of the preferred radar when using ASR-9 with Mode S or ASR-11 MSSR Beacon; or
 - 5. When the facility is operating in track-based display mode.

NOTE-

- 1. *ADS-B allows the expanded use of 3 NM separation in approved areas. It is not required for and does not affect the use of radar for 3 NM separation.*
- 2. *The Surveillance Services Directorate provides maps to facilities depicting the geographic areas and altitudes where ADS-B has been validated for 3 NM separation.*

d. MEARTS: All sort boxes within 40 NM of the sensor or within 60 NM of the sensor when using ASR-9 with Mode S or ASR-11 MSSR Beacon and with the single site indicator set to permit the use of 3 NM radar separation.

8-2-2. ADAPTED ALTIMETER SETTINGS

Ensure a current altimeter setting from the adapted reporting station for each radar sort box/surveillance sort cell or geographic area is input into the center's

computer. When an altimeter setting for an adapted reporting station cannot be obtained, enter the altimeter setting from the appropriate alternate reporting station.

8-2-3. ADAPTATION OF EXTERNAL ALTIMETER SETTINGS

Adaptation of altimeter settings for reporting stations outside a facility's area is optional up to the maximum number listed in the NAS adaptation specifications.

8-2-4. CONFLICT ALERT FUNCTION PARAMETERS

a. Use the approved CA preset values as defined in the ERAM Site Adaptation Manual (SAM) unless otherwise approved by the En Route and Oceanic Safety and Operation Support Office.

b. Facility air traffic managers are authorized to inhibit the display of CA at specified sectors and within ERAM Aircraft Alert Volumes (AAVs).

8-2-5. MODE C INTRUDER (MCI) ALERT PARAMETERS

a. Use the approved MCI CA preset values as defined in the ERAM Site Adaptation Manual (SAM) unless otherwise approved by the En Route and Oceanic Safety and Operations Support Office.

b. MCI Alert base altitude must be set at any value between ground level and 5,000 feet MSL at the discretion of the facility air traffic manager. When a facility's or sector's ground level is above 5,000 feet MSL, base altitudes may be set to 1,500 AGL. Any instance of base altitudes above 5,000 feet MSL must be documented and forwarded to the En Route and Oceanic Safety and Operations Support Office through the respective Service Area Operations Directorate.

c. Facility air traffic managers are authorized to temporarily adjust the Mode C Intruder Alert base altitude at a sector(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. The following is required when MCI base altitude is adjusted:

1. Log each occurrence when this procedure is used on FAA Form 7230–4, including the sector and temporary altitude.

2. Documentation must be forwarded according to subparagraph b above, if it is determined that a temporary adjustment of the MCI base altitude does not meet the needs of the sector.

3. Facility air traffic managers are authorized to inhibit the situation display of MCI Alert at specified sectors.

8–2–6. E–MSAW ADAPTATION

Ensure that all internal airspace is adapted for E-MSAW processing. Ensure that the internal altitude information adapted in the polygons agrees with the MIA sector charts and is in accordance with the ERAM Site Adaptation Manual.

8–2–7. INTERIM ALTITUDE FACILITY DIRECTIVE REQUIREMENTS

Where sector conditions (e.g., heavy traffic or sector complexity) preclude meeting the requirements of FAA Order JO 7110.65, Air Traffic Control, paragraph 5–14–3, Computer Entry of Flight Plan Information, ARTCC air traffic managers may authorize exceptions to the requirement to update the data block with a temporary altitude if an operational advantage is gained. A facility directive must be issued with instructions governing permissible procedures. It must contain:

- a. Procedures/sectors where the directive applies.
- b. Coordination procedures if required.
- c. Specific instructions to input a reported altitude for non–Mode C–equipped aircraft when it will operate at an altitude before proceeding to the assigned altitude.

8–2–8. REQUIREMENTS FOR ERAM DATA BLOCK CHANGES WITHOUT COORDINATION

Where sector conditions offer a significant operational advantage, air traffic managers may authorize exceptions to data block change coordination required by FAA Order JO 7110.65, Air Traffic Control, paragraph 5–4–5, Transferring Controller Handoff, and FAA Order JO 7110.65, Air

Traffic Control, paragraph 5–4–6, Receiving Controller Handoff. The facility directive or LOA must contain, at a minimum:

- a. Sectors where the directive or LOA applies.
- b. Specific situations where omission of coordination is permitted.

EXAMPLE–

LOA specifies the aircraft will be descending to FL290 and changes in interim altitude are authorized after handoff to get to FL 290.

NOTE–

Consideration needs to be given to the ability of all sector team members to readily discriminate the indicator in the B4 field under varied conditions, such as font size and brightness, situation display orientation, and lighting. There is a significant operational difference between accepting a handoff with:

- a. An “up arrow” in which aircraft will not climb beyond displayed assigned altitude, and*
- b. A “T” (interim) altitude where the aircraft may climb beyond the currently displayed interim altitude.*

8–2–9. ERAM HOLD INFORMATION FACILITY DIRECTIVE REQUIREMENTS

Where sector conditions offer a significant operational advantage, air traffic managers may authorize exceptions to FAA Order JO 7110.65, Air Traffic Control, paragraph 5–14–9, ERAM Computer Entry Hold Information. The facility directive must contain, at a minimum:

- a. Sectors where the directive applies.
- b. Required coordination procedures.
- c. Specific instructions for reporting delays.

8–2–10. ERAM SPECIAL ACTIVITY AIRSPACE (SAA) ADAPTATION

Facilities must ensure that every SAA within their Aircraft Problem Detection (APD) Area is adapted for SAA scheduling and alert processing.

8–2–11. ERAM HOLDING PATTERN ADAPTATION

Ensure published holding patterns on Standard Terminal Arrival Routes (STARs) are adapted to automatically populate the Hold Data Menu.

Section 10. UAS Facility Maps (UASFM)

12-10-1. POLICY

a. UASFM must be developed in accordance with FAA Order JO 7210.3, Chapter 12, Section 10.

b. The ATM will review the maps annually, or whenever modifications are necessary. Reasons for modifications include, but are not limited to:

1. Airspace changes.
2. Runway or airport property changes.
3. Changes in procedures.
4. Changes in volume of traffic.

c. If changes need to be made to the UASFM, forward your request to uasfm@faa.gov.

12-10-2. RESPONSIBILITY

The ATM will designate a primary and secondary UASFM Point of Contact (POC). When there are changes to the POCs, notify Headquarters at uasfm@faa.gov.

NOTE–

Facilities may use the facility group email address as their POC.

12-10-3. ASSUMPTIONS

a. There are portions of each facility's airspace at very low altitudes that a sUAS could operate without impacting IFR or VFR operations.

b. Part 107 operations by rule are exempt from the Part 91 rules that define VFR and IFR operations. Therefore, Part 107 operations are not defined as VFR or IFR and require no separation or services by ATC.

c. Evaluate each segment for the impact of the UAS flight to your operation (i.e., If a UAS flew in segment A1 at 400 feet, would that affect your operation? What about 300 feet or 200 feet?).

d. All runways are in use for arrival and departure.

e. Altitudes will be listed in 50-foot increments, starting at 0 feet (0, 50, etc.) and ending at 400 feet. Altitudes are listed as AGL.

NOTE–

Part 107 allows operators to fly 400 feet AGL and if within a 400-foot radius of a structure/obstacle, they can fly to the height of the structure plus 400 feet. However, the maps will only be evaluated to 400 feet AGL. For any request above 400 feet AGL, regardless of proximity to a structure/obstacle, headquarters will coordinate with the facility.

f. All UAS operations that are requested at or below the altitude listed for the segment for where the flight will occur will be approved without facility coordination. However, the facility will receive a copy of the authorization.

g. Zero (0) altitude means no UA flights authorized without facility coordination.

h. For UAS flights that take place in two or more segments, the lowest published altitude will be used.

i. When a UA operation has been approved, the affected facilities will receive an email that will include the responsible person's contact information, location, altitude, time and date of UA operation.

j. In the event two facilities overlap the same segment, the lowest altitude will be used for both facilities.

k. Items to consider:

1. Part 107 operators must comply with all parts of the Part 107 rule (i.e., Part 107 operators must maintain visual line of site with their UA, they must yield right-of-way to all aircraft, they are solely responsible for not operating in prohibited or restricted areas without prior permission, they are solely responsible for not operating in temporary flight restricted airspace, and they are solely responsible for not operating over nonparticipating people).

2. Diverse vector areas (DVA) and aircraft performing minimum departure climbs at 200 feet per mile.

3. Obstructions already present (i.e., a segment with 60-foot trees would allow UA to operate safely at 50 feet).

4. Low altitude operations (i.e., helipads).

5. The UA operator is solely responsible for avoiding ground hazards, sensitive areas (e.g.,

nuclear power plants, critical infrastructure and federal facilities), and areas where drone operations are prohibited.

12-10-4. AUTHORIZATION MAP DESIGN PROCEDURES CLASS B/C/D AIRSPACE

a. Each facility must review the assumptions section.

b. Each facility will work collaboratively with their workforce to develop the UA map. Each segment must be evaluated to determine the highest altitude a UA could operate without any coordination to the facility.

c. Facilities must evaluate all segments for the maximum altitude they will allow without further coordination within their area of jurisdiction for flights between 0–400 feet in 50-foot increments.

d. For partial segments, facilities only need to evaluate the area they have jurisdiction over but will show the altitude for the entire segment.

e. For segments outside your area of jurisdiction, leave the segments on the spreadsheet blank.

f. In areas where the overriding rule/law specifies no UAS operations (e.g., the DC FRZ), we are still asking facilities to complete the map as though operations could be permitted without the overriding regulations. There may be situations where law enforcement, DOD, etc. could ask for authorization under Part 107 and have the ability to operate in the area.

g. Once you have finished the spreadsheets, email them to uasfm@faa.gov.

12-10-5. PROCEDURES TO CHANGE UAS FACILITY MAP (UASFM) ALTITUDES

Facilities must use one of the following methods when making/requesting changes to their UASFM grid values:

a. Changes made using the web-based tool <https://uasfm.faa.gov> are immediately reflected on the facility UASFM. The UAS Service Suppliers (USS) have up to 24 hours after the changes are submitted to update their database.

1. The UASFM web-based tool can only be accessed using Google Chrome or Microsoft Edge web browsers.

2. To obtain access, facilities must follow the instructions contained on the UASFM web-based tool homepage.

b. Coordinate changes through HQ AJV-A utilizing the following procedures:

1. Request files via the uasfm@faa.gov email address.

2. Complete the Excel spreadsheet, inputting information on sheet 1 only. Altitude values must be 0–400 in 50 foot increments.

3. Evaluate all segments that are fully or partially contained within the lateral boundary of your airspace.

4. Save completed worksheet as XXX.xls, in which XXX is the facility ID.

5. Return the completed spreadsheet to uasfm@faa.gov include the following information in the email:

(a) Use only your facility ID in the subject line.

(b) Attach the spreadsheet.

(c) List your Map POC(s) (name, email address, phone number).

(d) List your authorization POC(s) (name, email address, and phone number).

(e) Date UASFM completed.

12-10-6. PART 107 OPERATION APPROVALS

a. The ATM will appoint a primary and secondary Facility UAS Authorization POC who will receive notification of the final authorization from Headquarters. Forward any changes to the Facility UAS Authorization POC to uasfm@faa.gov.

NOTE–

Facilities may use the facility group email address as their POC.

b. If Part 107 operations cannot be authorized using the UASFM, facilities will be contacted by Headquarter/Service Center for coordination.

c. Facilities will evaluate the request for authorization for impact to the operation. Waivers that list

any mitigations pending approval by Headquarters/Service Centers will be included with the authorization request for the facility's consideration.

d. If the facility deems the impact of the operation to be acceptable as proposed, the operation will be authorized.

e. If the facility deems the impact to be unacceptable as proposed, they may prescribe mitigations on the operation, which may include but are not limited to:

- 1.** Limits on altitude.
- 2.** Adjusting times and dates of operation.
- 3.** Operator notification to the Facility (i.e., start, stop times).
- 4.** Adjusting Location.
- f.** For operations on the airfield, procedures between the facility and the proponent are a prerequisite to obtaining an airspace authorization.
- g.** If mitigations cannot be agreed upon, the operation will be denied.

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.

18-4-7. SPACE LAUNCH OR REENTRY VEHICLE MISHAPS

a. A debris-generating space launch or reentry vehicle mishap is an emergency situation in the NAS.

All efforts should be made to safely mitigate aircraft exposure to falling debris.

b. Upon notification of a debris-generating space launch or reentry vehicle mishap, or the activation of a debris response area (DRA), the ARTCC/Terminal TMU whose geographic area of responsibility is

impacted must, to the extent possible, take actions to help mitigate aircraft exposure to falling debris.

Section 10. Ground Delay Programs

18-10-1. POLICY

Ground Delay Programs (GDP) must be applied to all aircraft departing airports in the contiguous U.S., as well as, from select Canadian airports. Aircraft that have been assigned an EDCT in a GDP should not be subject to additional delay. Exceptions to this policy are miles-in-trail and departure/en route spacing initiatives that have been approved by the ATCSCC. GDP procedures do not apply to facilities in Alaska.

18-10-2. GENERAL

A GDP is a TM process administered by the ATCSCC; when aircraft are held on the ground in order to manage capacity and demand at a specific location, by assigning arrival slots. The purpose of the program is to support the TM mission and limit airborne holding. It is a flexible program and may be implemented in various forms depending upon the needs of the air traffic system. The EDCT is calculated based on the estimated time en route and the arrival slot. It is important for aircraft to depart as close as possible to the EDCT to ensure accurate delivery of aircraft to the impacted location. GDPs provide for equitable assignment of delays to all system users.

18-10-3. BACKGROUND

In the past, GDPs were issued manually, followed by software called Groverjack. These systems were based on the Official Airline Guide data, and did not take into account dynamic changes the system users made to their schedule. The Flight Schedule Monitor (FSM) was developed through the collaborative decision making (CDM) process with system users to provide a dynamic method of implementing and managing GDPs. System users submit schedule changes to FSM, which keeps a current up-to-the-minute schedule of flights. The Flight Schedule Analyzer (FSA) is used to monitor and review the effectiveness of GDPs.

18-10-4. DEFINITIONS

a. GDP Parameters. Aircraft departing within a defined geographical area are initially assigned delay in the GDP. This area is developed using the FSM,

and may consist of one or more ARTCCs and one or more Canadian airports. All departure aircraft will receive an EDCT to the GDP airport.

b. Delay Assignment (DAS). A method for assigning delays to aircraft based on the GDP parameters. The delay assignment is calculated in 15-minute increments and appears as a table in TFMS.

c. General Aviation Airport Program (GAAP). A method for assigning delays to aircraft based on arrival slot availability at the airport.

d. Unified Ground Delay Program (UDP). This program type addresses the mix of scheduled and unscheduled (i.e., pop-ups) demand based on the following parameters: number of reserved pop-ups, target delay multiplier, and delay limit.

18-10-5. VARIABLES IN GDPs

GDPs may be modified and affected due to changing conditions. Some of those variables include, but are not limited to, GDP Adjustments, Diversion Recovery, and User Options.

a. GDP Adjustments. The ATCSCC may make revisions and compressions to the GDP as conditions at the airport or within the airspace change.

b. Diversion Recovery. During periods where there are a large number of diverted flights, the GDP may be adjusted to provide priority for the recovery of aircraft diversions over non-diverted flights.

c. User Options. Users are permitted to exchange and substitute Controlled Times of Arrival (CTA) congruent with CDM agreements concerning substitutions.

18-10-6. ATCSCC PROCEDURES

Upon receipt of information that traffic flows have been or are expected to be impacted and that significant delays will result, the ATCSCC must:

a. Conference affected facilities and system users, as appropriate, to determine AARs and review system demand and other known or anticipated factors.

b. Determine when implementation of a GDP is appropriate and the flow rate to be used.

Consideration will be given to the impact on other air traffic control facilities and user groups.

c. Transmit an ATCSCC advisory providing information to air traffic control facilities and user groups about the implementation, revision, compression, and cancellation of a GDP. Except for the cancellation of a GDP, the ATCSCC advisory must include the following items:

1. Airport.
2. Delay Assignment Mode.
3. Aggregate Demand List (ADL) Time.
4. Program Type. (Optional)
5. Arrivals Estimated For.
6. Program Rate.
7. Flights Included.
8. Scope.
9. Additional Facilities Included.
10. Exempt Facilities.
11. Canadian Airports Included. (When applicable.)
12. Delay Assignment Table Applies To. (Optional.)
13. Maximum Delay or Delay Limit. (As appropriate).
14. Average Delay. (Optional).
15. Reason.
16. Remarks.

d. Transmit the DAS table to ARTCC TMUs via TFMS and the NADIN circuits, if appropriate.

e. Transmit EDCTs to ARTCCs and linked system users.

NOTE—

A CT message is automatically transferred to the ARTCC's computers by the ETMS and appears on flight progress strips as an EDCT. In the event of a communication failure between the ETMS and the NAS computer, the CT message can be manually entered by the ARTCC TMC with ATCSCC approval.

f. Input ATCSCC coordinated modifications to EDCT into FSM.

NOTE—

Modifications may be made through TFMS.

g. Continually monitor, adjust, and cancel GDPs, as appropriate, and transmit an ATCSCC advisory as necessary.

h. Provide an EDCT or DAS when requested by an ARTCC.

i. Coordinate with affected facilities to ensure the GDP is adequately managing the demand.

j. Obtain arrival and departure counts from affected facilities, as appropriate.

k. Utilize the TSD and FSM to monitor traffic flow patterns, obtain estimated arrival counts, or obtain airborne delay estimates.

l. When appropriate and workload permitting, utilize FSA to monitor the GDP.

18–10–7. ARTCC PROCEDURES

The ARTCC TMU must:

a. Issue a General Information message (GI) to all towers and FSSs advising of the GDP. In some instances, verbal notification, in addition to a GI, may enhance the dissemination of information.

b. Issue EDCT information to non–FDEP/FDIO equipped towers and other users in sufficient time for proper planning and control actions. This does not include non–FDEP towers that are satellites of TRACON/RAPCON facilities. The TRACON/RAPCON is responsible for satellite EDCTs.

c. Evaluate the Delay Assignment Mode and assign EDCTs, as appropriate.

1. For DAS, assign an EDCT using the DAS table to aircraft that do not receive an EDCT and are destined to an affected airport within their ARTCC boundaries. Contact the ATCSCC for aircraft destined to an airport outside their ARTCC boundaries.

2. For GAAP, contact the ATCSCC for an EDCT for aircraft that do not receive an EDCT.

d. Keep the ATCSCC apprised of cancellations and diversions to or from the affected airport.

e. Relay information to the ATCSCC when advised by a terminal facility about EDCT issues.

f. Request a revised EDCT from the ATCSCC when notified by the terminal facility that a flight will be unable to depart within EDCT parameters as defined in FAA Order JO 7110.65, Air Traffic Control.

g. Advise the appropriate terminal facility or controller after receiving a revised EDCT from the ATCSCC.

h. Utilize FSM to obtain information about the GDP, and may utilize FSA to monitor the GDP.

18-10-8. TERMINAL PROCEDURES

The Terminal TMU must:

a. Utilize FSM, if available, to obtain EDCT information.

b. Obtain from the ARTCC TMU and apply the appropriate delay to:

1. Airfile aircraft destined to the affected airport.

2. Any other flight not assigned an EDCT.

c. Ensure that internal flight plans are entered into the EAS computer in order to receive an equitable delay.

d. Ensure the EDCT is included in the flight clearance when a GDP is in effect. If an EDCT is not received and a GDP is in effect, contact the ARTCC TMU for an EDCT.

e. Issue EDCT information to non-FDEP/FDIO equipped towers and other users in sufficient time for proper planning and control actions.

f. To the extent possible, plan ground movement of aircraft destined to the affected airport so that flights will meet the parameters in FAA Order JO 7110.65, Air Traffic Control. If unable, advise the ATCSCC, through the appropriate protocol.

g. Ensure aircraft with an EDCT that are in a Ground Stop are not released without the approval of the issuing authority for the Ground Stop.

h. When a GDP is in effect for the local airport, forward the total number of hourly arrivals and departures to the ATCSCC, through the appropriate protocol, as soon as possible after each hour in order that timely GDP adjustments may be made.

i. Coordinate closely with the appropriate ARTCC TMU on conditions affecting current or projected arrival rates.

NOTE-

Terminal facilities may utilize FSM to obtain information

concerning the GDP, including EDCTs, and may utilize FSA to monitor the GDP.

18-10-9. AMENDING EDCTs

a. All requests to amend EDCTs earlier than the current EDCT must be coordinated with the ATCSCC.

b. Facilities without FSM should contact their overlying facility to request a new EDCT.

c. Modifications to EDCTs for a time later than the current EDCT must be processed in accordance with the following guidelines:

1. The pilot/operator must be in contact with ATC.

2. Facilities with FSM may utilize the EDCT Change Request (ECR) tool to assign a new EDCT utilizing the Slot Credit Substitution (SCS) method, followed by the unlimited delay option, when available.

3. If the time generated by ECR is not acceptable (normally two hours of additional delay or longer), the facility must contact the ATCSCC through the appropriate protocol, for a new EDCT.

d. All EDCTs amendments not obtained using the ECR tool must be coordinated via the appropriate protocol.

18-10-10. CANCELLATION PROCEDURES

a. When conditions no longer warrant ground delays, the ATCSCC must:

1. Conference all affected facilities and system users, as appropriate, to develop an operational plan for release of ground delayed traffic into the system.

2. Transmit an ATCSCC advisory stating the GDP has been cancelled. The advisory must include the following items:

(a) Airport.

(b) ADL Time.

(c) Reason.

(d) Remarks.

3. Purge flights from the TFMS.

b. The ARTCC TMU and the Terminal TMU must:

1. Issue cancellation information to underlying facilities, using normal communication methods, in sufficient time for proper planning and control actions.

2. Notify facility personnel, as appropriate, of the cancellation.

18-10-11. DOCUMENTATION

- a. The ATCSCC must document all pertinent information related to the GDP in their position logs, including, but not limited to, the start and stop times and the reason for the GDP.

- b. The ARTCC TMU and the Terminal TMU must document all pertinent information related to the GDP.

18-10-12. USER OPTIONS

When a GDP is in effect, system users may exercise options other than ground delays. Users must coordinate options directly with the ATCSCC.

- a. Intermediate landing. The flight should land at the intermediate airport to provide the delay necessary for the flight to arrive at the CTA. An intermediate landing airport within the arrival ARTCC should not be accepted without coordination and approval from the ATCSCC.

- b. Substitution of flights.

1. Users are permitted to exchange and substitute CTAs congruent with CDM agreements concerning substitutions. The ATCSCC may deny substitution requests when:

- (a) AARs are varying rapidly.

- (b) Workload necessitates.

- (c) Deemed appropriate by the NOM/NTMO.

2. The ATCSCC must:

- (a) Ensure that when flights are traded, the delay factor is equal to the original delay factor after the trade/substitution has been completed.

- (b) Document substitutions.

- (c) Transmit an ATCSCC advisory when substitutions are suspended and include an estimated time when substitutions will resume.

18-10-13. VFR FLIGHTS

- a. VFR flights requesting an IFR clearance to a GDP airport should be handled as follows:

1. DAS. Assign a delay from the DAS table.

2. GAAP. Call the ATCSCC for a time.

- b. Aircraft requesting to remain VFR will be at the discretion of the terminal facility with the GDP, if they can be accommodated without additional delay to IFR aircraft, except in unusual circumstances; for example, emergency, MEDEVAC.

Section 17. Preferred IFR Routes Program

18-17-1. GENERAL

a. This section identifies responsibilities and establishes procedures for the development, revision, and cancellation of Preferred IFR Routes. These routes, as published in the Chart Supplement U.S., include Low Altitude, High Altitude, Tower En route Control (TEC), North American Routes (NAR), and both High and Low Single Direction Routes (HSD/LSD). The objective of Preferred IFR Routes is the expeditious movement of traffic during heavy demand periods and the reduction of TMIs and coordination.

b. Preferred IFR Routes must only be established when traffic density and/or safety make such routes necessary for the expeditious movement of air traffic.

c. Preferred IFR Routes must be developed in accordance with paragraph 18-17-3, Development Procedures.

18-17-2. RESPONSIBILITIES

a. ARTCCs are responsible for:

1. Developing, revising, and deleting Preferred IFR Routes. The originating ARTCC is responsible for coordinating with all affected facilities, ensuring the accuracy of the submitted route(s), examining routes for operational impact, and ensuring compatibility with NAS processing.

2. At a minimum, reviewing all Preferred IFR Routes annually and revising or canceling routes as necessary.

3. Identifying a single Office of Primary Responsibility (OPR) for their Preferred IFR Routes program. This office must be the focal point for coordination with affected FAA facilities and the ATCSCC.

b. The ATCSCC is responsible for:

1. Operating as the OPR at the National level

2. Reviewing and evaluating Preferred IFR Route submissions

3. Submitting approved Preferred IFR Routes to AIS for publication

4. Providing feedback on unapproved routes to the submitting OPR

c. The AIS must be responsible for:

1. Entering the route in the national database.

2. Forwarding errors noted during the validation to the ATCSCC for resolution.

3. Publishing the route as an add-on page to the National Flight Data Digest (NFDD).

18-17-3. DEVELOPMENT PROCEDURES

a. Routes and route segments must be defined by any combination of the following:

1. DPs/SIDs/STARs if applicable

2. NAVAID identifier, intersection name, fix name, RNAV Waypoint or Navigation Reference System Waypoints (NRS) (e.g., FUZ, ZEMMA, KK45G).

3. Type and number of the airway (e.g., J87 M201 Q40 T295 V16)

b. When establishing or amending Preferred IFR Routes the following rules must be applied:

1. When including a DP/SID/STAR use a published transition fix or the common fix for the procedure.

2. When describing an airway include a published entry and exit point (e.g., CVE J87 BILEE).

3. When connecting two airways, a published fix common to both airways and that is depicted on en route charts must be included (e.g., ADM J21 ACT J50). If there is not a fix common to both airways, include a published exit point for the first airway and a published entrance point for the second airway (e.g., OCS J206 NLTEN CYS J148).

4. The first route element following the origin must not be an airway (e.g., KDFW J4).

5. The last route element prior to the destination must not be an airway (e.g., J35 KMSY).

6. Inclusive altitudes must be used when describing a Low Altitude Preferred IFR Route.

7. Low frequency non-directional beacons must not be used.

c. Other considerations should include:

1. Terminal/en route traffic flows

2. Radar coverage

3. SAA/SUA

4. Adapted Arrival (AARs), Adapted Departure (ADRs) and Adapted Departure and Arrival Routes (ADARs).

5. MEA, MOCA, and Minimum Reception Altitude (MRA) must be considered when establishing inclusive altitudes for Low Altitude routes.

6. When describing High Altitude preferred routes, victor airways may only be used to define climbing/descending segments, provided that such usage does not exceed the service limitations of the NAVAID.

7. Single direction routes may be established in the high altitude stratum to enhance safety and expedite air traffic. The routes may begin or end at any fix within the en route structure and need not serve a specific terminal area. Single direction routes serving terminal/en route needs must be depicted on en route charts.

18-17-4. COORDINATION PROCEDURES

a. Interfacility Coordination

1. The originating ARTCC is defined as follows:

(a) New Routes: The ARTCC identifying the need to establish a new Preferred IFR Route.

(b) Existing Routes: The ARTCC identifying the need to amend or delete a Preferred IFR Route.

(c) When establishing, amending, or deleting a Preferred IFR Route is proposed by a facility other than an ARTCC, the requesting facility must coordinate with the parent ARTCC. The overlying ARTCC must assume responsibility as the originator.

2. The originating ARTCC must:

(a) Coordinate with all affected ATC facilities.

(b) Upon completion of the coordination process, submit data to the ATCSCC Point of Contact (POC).

3. The ATCSCC must:

(a) Resolve differences between ATC facilities.

(b) Review for accuracy and forward the completed data to the AIS for publication.

18-17-5. PROCESSING AND PUBLICATION

a. The airspace information cutoff date listed in the Chart Supplement U.S. is the latest date route information may be received by AIS to ensure publication on the planned effective date. The following procedures must apply:

1. Plan effective dates to coincide with the Chart Supplement U.S. publication dates.

2. ARTCCs must submit completed data to the ATCSCC at least 21 days prior to the desired publication cutoff date. The data must be submitted via the AIS Preferred IFR Routes submission form. The ATCSCC will provide the OPR with this form.

3. The ATCSCC must forward the completed data to the AIS on or before the desired publication cutoff date.

Appendix 2. [RESERVED]



Appendix 5. Checklist for Reported Headset Tone Incidents

This form will be completed by the operations supervisor (OS)/controller-in-charge (CIC) and must be retained by the employee's OS for a period of 1 year.

Checklist Requirement for Headset Tone Incidents	OS/CIC Initials
Ensure that Technical Operations is notified to evaluate the affected operational position and associated NAS equipment for normal operations as soon as possible.	
Secure the affected headset for testing by facility Air Traffic Management. <i>Note: The affected employee and their union representative will be given the opportunity to observe the headset testing.</i>	
Secure the recording of the headset tone incident. <i>Note: FAA Tech Ops may use the recording to conduct a root-cause analysis.</i>	
Record the incident on FAA Form 7230-4, Daily Record of Facility Operation, using the "E" entry. <i>Note: Carry the item on the facility log until headset testing has been completed.</i>	
When headset testing is complete, annotate the facility log using an "E" entry with the statement, "Tests complete. (Record test results)." Report any abnormal test results (headset or other communications equipment), as appropriate, on FAA Form 7230-4, Daily Record of Facility Operation. <i>Note: The ATM must ensure headsets which fail the headset testing are secured and, within 30 days, contact the Oklahoma Communications Engineering Team, AJW-173, at (405) 954-0066 for instructions to return the headset to the manufacturer.</i>	
Update the Safety Management Information System (SMIS) to reflect the headset tone incident.	
Determine if the employee intends to file a DOL Form CA-1, <i>Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation</i> . The facility supervisor will assist the employee in filing DOL Form CA-1, if requested. <i>Note: FAA employees file CA-1 claims forms via ECOMP.</i>	
If any employee wishes to be medically evaluated due to a headset tone incident, complete DOL Form CA-16, <i>Authorization for Medical Treatment</i> , in accordance with the Federal Employee Compensation Act (FECA). <i>Note: FAA employees file CA-16 claims forms via ECOMP.</i>	

Appendix 6. Commercial Space LOA Sample Templates

[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Operator]

Letter of Agreement

Effective:

Subject: Coordination of [Operator] Launch/Reentry Operations from [name and location of Launch and (if applicable) Reentry site]

1. Purpose:

State the purpose of the Letters of Agreement (LOA), type of operation (launch, launch with reentry), and location of operation (name and location of launch and (if applicable) Reentry site). If LOA is for a one-time operation, state that.

Sample text:

This Letters of Agreement (LOA) provides procedures for the integration and appropriate coordination of [licensed/permitted] [Vehicle Type: horizontal/vertical] [launch/launch with reentry/hover-test] operations into the National Airspace System (NAS) from [name and location of launch and (if applicable) Reentry site].

2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

Sample text:

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the [license/permit] or when modifications are made to the [license/permit].

3. Scope:

List the pertinent ATC facilities, Operator, and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities as applicable. State distribution of the LOA. The distribution should include, at a minimum, all signatories and the Office of Commercial Space Transportation (AST).

Sample Text:

This LOA is pertinent to [ATC facilities], [additional stakeholders], and [Operator]. It is to be distributed to all signatories and stakeholders].

4. Responsibilities:

State the responsibilities of the Operator, Controlling Facility, and as needed, any other stakeholders and/or affected facilities.

- a. Operator must fulfill requirements provided in the Sample Text for this section.
- b. Controlling Facility must fulfill requirements provided in the Sample Text for this section and
 1. Fill out the Points of Contact Table (Attachment B).
 2. Fill out the Actions Timetable (Attachment C)
- c. (As needed) Other stakeholders and affected facilities must:
 1. Ensure appropriate personnel are aware of the provisions of this agreement.

Sample text for Operator:

- a. [Operator] must:
 1. Ensure all Operator [and their designees] personnel operating within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement.
 2. Establish, make available, and be prepared to execute approved contingency plan(s).

a) Unless an established contingency plan has been approved by all necessary parties, [Operator] must coordinate requirements and get approval from [Controlling Facility] for contingency plan(s) at least [XX] calendar days prior to each operation.

3. Follow the procedures in Section 5 and the Action Timetable (Attachment C) with regards to communications and notifications.

4. Notify the parties in the Points of Contact Table (Attachment B) immediately if scheduled operations are cancelled.

5. (*As needed*) Develop separate agreements with foreign Air Navigation Service Providers when airspace coordination outside of the U.S. Flight Information Region is needed for the operation.

Sample text for Controlling Facility:

b. [Controlling Facility] must:

1. Ensure all personnel responsible for providing air traffic service within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement. This includes notification to other affected facilities.

2. Ensure appropriate [Controlling Facility] personnel are aware of and prepared to execute approved contingency plan(s).

3. Communicate with necessary facilities and ascertain their readiness to execute approved contingency plan(s).

4. Except when real time notifications of actual start of activity and end of activity times are provided to the facility via ATO Space Operations coordination, take appropriate actions to restrict airspace use during the effective times of the aircraft hazard area(s).

5. Take additional measures for public safety deemed necessary by 14 CFR Parts 400–460.

Sample text as needed:

c. (*As needed*) [Other stakeholders and affected facilities] must:

1. Ensure appropriate personnel are aware of the provisions of this agreement.

2. Ensure appropriate personnel are aware of and prepared to execute approved contingency plan(s).

d. Deviations from responsibilities and/or procedures established in this LOA must be coordinated prior to each operation, and responsibilities must be clearly defined in each case.

5. Procedures:

Specify timeline and details for activities to take place prior to, during, and upon completion of operation.

Specify frequency of proposed operations and any limitations when considering dates and times of operations.

Include any restrictions on days of week and/or times of day operations that may or may not occur. Restrictions may include times when military operations require use of certain airspace. Specify procedure(s) for handling anomalies and emergencies. Information conveyed should include the location of event (latitude and longitude, represented as degree–minute–second) (when available), vehicle state, projected time the hazard will no longer be present, and any other pertinent details.

Sample text:

a. [Operator] must:

1. Provide a Launch/Reentry Forecast Package to the parties specified in the Points of Contact Table (Attachment B), except Central Altitude Reservation Facility (CARF), at least once every [XX] months. These forecasts will include a best estimate of all anticipated launches for the upcoming [XX] months.

2. Provide [Controlling Facility] a pre–planning package a minimum of [XX] calendar days prior to the planned operation. At a minimum, the package should include:

a) The launch/reentry window.

b) The best estimate of the geographic definition of the hazard area(s) (latitude and longitude, represented as degree–minute–second) (when available) for the primary date and any back–up date(s).

c) (*As needed*) Any support aircraft's type and call sign.

3. (*As needed*) Submit Altitude Reservation (ALTRV) request(s) to CARF (and email a copy of the request to the [Controlling Facility]) a minimum of [XX] days prior to the planned operation.

4. Verify the issuance of the appropriate NOTAMs.

5. No less than [XX] minutes in advance of a planned operation, notification will be given by [Operator] to [Controlling Facility] of intent for the [launch/hover-test] to take place.

6. During the operation, a [Operator] representative must participate on an FAA Hotline teleconference with [Controlling Facility] and ATO Space Operations (see Actions Timetable, Attachment C, for phone number). Communication on the FAA Hotline teleconference must be established no less than [XX] minutes prior to planned operation.

a) The [Operator] representative must be able to provide real-time verbal indications of the status of the operation, its progress along the launch/reentry trajectory, and occurrence of significant events.

b) Participation by representative(s) from [other stakeholders and affected facilities] is advised.

7. Notify [Controlling Facility] upon completion of the operation.

8. (*As needed*) Contact CARF and request that the appropriate ALTRVs be cancelled.

9. In the event of an anomaly, a [Operator] representative must immediately notify [Controlling Facility], via FAA Hotline teleconference, of the occurrence of the anomaly. Information communicated should include, at a minimum:

a) The last known state of the vehicle.

b) The location of the off-nominal event (latitude and longitude, represented as degree-minute-second) (when available).

c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) (when available).

d) Projected time the hazard(s) will no longer be present (when known).

e) Other information that will provide estimated positions of hazards.

10. In the event of an emergency, [Operator] must immediately contact [Controlling Facility], via FAA Hotline teleconference and email all the parties listed in the Points of Contact Table (Attachment B). Information conveyed should include, at a minimum:

a) The last known state of the vehicle.

b) The location of the event (latitude and longitude, represented as degree-minute-second) (when available).

c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) (when available).

d) Projected time the hazard(s) will no longer be present (when known).

e) Other information that will provide estimated positions of hazards.

b. [Controlling Facility]:

1. Upon notification of a completed operation, [Controlling Facility] must cancel appropriate airspace restrictions and/or NOTAMs.

2. In the event when [Controlling Facility] becomes aware of a condition that would make the launch/reentry unsafe, [Controlling Facility] must immediately contact, via FAA Hotline, [Operator] and all other parties listed in the Points of Contact Table (Attachment B).

6. Attachments

a. Signatures

b. Points of Contact Table

c. Actions Timetable

d. Only include graphics that are applicable to this scenario:

- Launch/Reentry Site Description/Map
- Aircraft Hazard Area Description/Map
- Temporary Flight Restriction Description/Map
- Air Traffic Control Assigned Airspace Description/Map

■ e. Commercial Launch/Reentry Site LOA

Attachment A: Signatures

[Controlling Facility]

[Operator]



[ATO Space Operations]

[as appropriate, other stakeholders, including Federal Ranges and military facilities]

Attachment B: Points of Contact Table

The following table should be completed by the [Controlling Facility] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[Operator]			
[Controlling Facility] Supervisor in Charge			
[Controlling Facility] Traffic Management Unit			
ATO Space Operations			
Central Altitude Reservation Function (CARF)			
National Traffic Management Office (NTMO)			

Attachment C: Actions Timetable

The following table should be completed by [Controlling Facility]. In coordination with the [Controlling Facility], [Operator] must ensure that the following actions are completed at the defined intervals.

Time	Event	Remarks	Date Completed
T – [XX] months Suggestion: T – 6 months	Submit Launch/reentry Forecast Package	Operator should provide best estimate of all known launch/reentry dates for upcoming six months.	
T – [XX] calendar days Suggestion: T – 30 – 60 calendar days	Coordinate launch/reentry corridor/hazard area(s)	Operator should coordinate with ATO Space Operations and as appropriate, other affected facilities.	
T – [XX] calendar days Suggestion: T – 10 calendar days	Submit Pre-Planning Package	Operator should provide a description of the Aircraft Hazard Area(s), along with date(s) and time(s) for launch/reentry.	

Time	Event	Remarks	Date Completed
T – [XX] calendar days Suggestion: T – 5 – 14 calendar days	File an Altitude Reservation (ALTRV) request with CARF (as needed)	Operator is responsible for coordinating all necessary ALTRV requests. Requests should be submitted via email to _____@FAA.gov A copy of the request should also be emailed to [Controlling Facility]. Contact:	
T – [XX] hours	Verify issuance of appropriate airspace notices (NOTAMs and TFRs)	Operator should contact [Controlling Facility] for issuance of TFR(s) and NOTAM(s) (as needed). Per 14 CFR § 91.143, TFRs need to be issued at least ____ hours in advance of the scheduled operation.	
T – [XX] hours and repeat again at T – [XX] hours Suggestion: T – 24 hours and 3 hours	Provide operational status report	Operator contacts [Controlling Facility] via [telephone/email] and provides operational status report, which includes confirmation of intent and specifics of operation.	
T – [XX] minutes Suggestion: T – 60 – 30 minutes	Establish Hotline connection	[FAA Hotline telephone #] The operation will be delayed or terminated if the Operator does not establish communications via FAA Hotline teleconference. Operator must have a representative on the FAA Hotline teleconference until the operation is complete.	
T – [XX] minutes Suggestion: T – 30 minutes	Provide operational status report	Operator provides operational status report. This report includes confirmation that the operation will take place as scheduled. As necessary, Operator should continue to communicate any significant operational changes.	

Time	Event	Remarks	Date Completed
T – [XX] minutes and repeat at T – [XX] minutes Suggestion: T – 10 minutes and T – 5 minutes	Receive final clearance or confirmation of continued approved mission status	Operator must receive clearance or confirmation of continued approved mission status from [Controlling Facility] to proceed with operation.	
During operation	Maintain real-time communication via FAA Hotline teleconference	Operator must provide real-time verbal indications on the status of the vehicle.	
Post-operation or mission cancellation	Notify ATC and CARF (if applicable) of completion or cancellation of operation	ATC must be notified when operation is complete. TFR(s), ALTRV(s), and any other necessary notices should be cancelled as soon as practicable.	
	Schedule post-operation debrief	A debrief should occur ideally within __ hours, but no later than __ hours of the completion of the operation. A debrief should be conducted even if no off-nominal activity occurred.	

Instructions for Letter of Agreement Template: Launch and Reentry Site

Letter of Agreement

Effective:

Subject: Operations at [Name and location of Launch and Reentry Site]

1. Purpose:

State the purpose of the Letters of Agreement (LOA), type(s) of anticipated operation (*if launch*: [horizontal/vertical]) [launch/reentry], frequency of proposed operation(s) (if known), and name and location of Launch and Reentry Site.

Sample text:

This LOA establishes a framework for the coordination and planning of procedures for [licensed/permitted] (*if launch*: [horizontal/vertical]) [launch/reentry] operations into the National Airspace System from [name and location of Launch and Reentry Site].

2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

Sample text:

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the license or when modifications are made to the license.

3. Scope:

List the affected ATC facilities; Launch/Reentry Site Operator; and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities, as applicable.

State that this LOA does not guarantee the approval of operations from the Launch and Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate letter of agreement with each Vehicle Operator.

State that this LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

State distribution of the LOA. The distribution should include, at a minimum, all signatories.

Sample text:

This LOA is pertinent to [ATC facilities and stakeholders; including ATO Space Operations] and [Launch/Reentry Site Operator]. It does not guarantee the approval of operations from the Launch/Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate LOA with each Vehicle Operator.

This LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

This LOA is to be distributed to the signatories, additional stakeholders, and the Office of Commercial Space Transportation (AST).

4. Responsibilities:

State the responsibilities of the Site Operator, Controlling Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

a. Procedures for notification and scheduling of operations, to include procedures for the issuance of Notices to Air Missions, Altitude Reservations and Special Activity Airspace access.

b. Plans for communication between the operator and the FAA as necessary, before, during, and after a scheduled operation.

■ **[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Launch and Reentry Site Operator]**

- c. Plans and procedures for cancellations, contingencies, and emergencies.
- d. Plans and procedures for any other measures deemed necessary by the FAA to ensure public health and safety.

Sample text:

- a. [Launch/Reentry Site Operator] is responsible for the management, operation, and maintenance of the Launch/Reentry Site. This includes the coordination with users of its facility and the responsibility for ensuring all necessary information regarding operations is provided to the appropriate ATC facilities.
- b. The FAA is responsible for the safe, orderly, and expeditious flow of known air traffic under its control. It is also responsible for the dissemination of pertinent information to the aviation community.
- c. All parties named in this LOA will work collaboratively to develop procedures and other such measures deemed necessary to protect public health and safety.

5. Attachments

■ State the responsibilities of the Site Operator, Controlling Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

- A. Signatures
- B. Points of Contact Table
- C. Graphics/Maps
 - Physical Site Description/Map
 - Airspace Description/Map(s)

[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Launch and Reentry Site Operator]



Attachment A: Signatures

[Controlling Facility]

[Launch/Reentry Site Operator]



[ATO Space Operations]

[As appropriate, other stakeholders, including Federal Ranges and military facilities.]

[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Launch and Reentry Site Operator]

Attachment B: Points of Contact Table

The following table should be completed by the [Controlling Facility] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[Controlling Facility] Airspace and Procedures Office			
[Controlling Facility] Traffic Management Unit			
ATO Space Operations			
[Launch and Reentry Site Operator]			

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BRIEFING GUIDE



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

Initiated By: AJV-0
Vice President, Mission Support Services

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1. PARAGRAPH NUMBER AND TITLE:

1–2–4. ABBREVIATIONS

2–1–14. AIRCRAFT IDENTIFICATION PROBLEMS

APPENDIX 2. AIR CARRIER POINTS OF CONTACT FOR AIRCRAFT IDENTIFICATION PROBLEMS

2. BACKGROUND: In response to an Air Traffic Safety Action Program (ATSAP) recommendation, and in collaboration with both the National Air Traffic Controllers Association (NATCA) and the Central Service Area Event Review Committee (ERC), this change provides guidance for air traffic control (ATC) field facilities. The guidance provides facilities up-to-date information about air carrier points of contact (POC), when trying to prevent similar sounding callsign communication issues. This change also includes slight editorial changes.

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

Add

OLD**2–1–14. AIRCRAFT IDENTIFICATION PROBLEMS**

Title through a **NOTE**

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.

OLD**Appendix 2. Air Carrier Points of Contact for Aircraft Identification Problems****NEW****1–2–4. ABBREVIATIONS**

No Change

No Change

DDSO **Deputy Director of System Operations****TMO** **Traffic Management Officer****NEW****2–1–14. AIRCRAFT IDENTIFICATION PROBLEMS**

No Change

1. For carriers listed at the following web address, <http://tfms.faa.gov/airlinephones.html>, contact the appropriate airline office.

2. For carriers **not** listed on the website, contact the operator or the chief pilot of the carrier concerned. **Changes to the list can be provided to the ATCSCC Facility Automation Office via the Traffic Management Officer (TMO) or the Deputy Director of System Operations (DDSO).**

NEW**Appendix 2. [RESERVED]****OLD**

<u>IDENTIFIER</u>	<u>AIRLINE</u>	<u>TELEPHONE</u>
<u>A4A</u>	<u>AIRLINES FOR AMERICA @ATCSCC</u>	<u>(540) 422–4139</u>
<u>AAL</u>	<u>AMERICAN AIRLINES</u>	<u>(682) 315–7521</u>
<u>AAV</u>	<u>ALLIEGIANT AIRLINES</u>	<u>(702) 830–8757</u>
<u>ACA</u>	<u>AIR CANADA</u>	<u>(905) 861–7529</u>
<u>AFL</u>	<u>AEROFLOT AIRLINES</u>	<u>(404) 715–1948</u>

<u>AFR</u>	<u>AIR FRANCE</u>	<u>011 (33) 141 56 50 75</u>
<u>AJT</u>	<u>AMERIJET</u>	<u>(305) 704-9640</u>
<u>AMX</u>	<u>AEROMEXICO</u>	<u>011 (52) (55) 9132-6119</u>
<u>ANA</u>	<u>ALL NIPPON</u>	<u>011 (81) (3) 5757 5447</u>
<u>ASA</u>	<u>ALASKA AIRLINES</u>	<u>(866) 286-1563</u>
<u>ASH</u>	<u>MESA AIRLINES</u>	<u>(602) 685-4300</u>
<u>ASQ</u>	<u>EXPRESS JET</u>	<u>(404) 856-1947</u>
<u>AUA</u>	<u>AUSTRIAN AIR</u>	<u>011 (43) 17 0076 6000</u>
<u>AVA</u>	<u>AVIANCA</u>	<u>(786) 265-3966</u>
<u>AWI</u>	<u>AIR WISCONSIN</u>	<u>(920) 749-4250</u>
<u>AZA</u>	<u>ALITALIA</u>	<u>011 (39) 066 56 32870</u>
<u>BAW</u>	<u>BRITISH AIRWAYS</u>	<u>011 (44) (20) 8513 0455</u>
<u>BEL</u>	<u>BRUSSELS AIRLINES</u>	<u>(718) 751-2207</u>
<u>BHS</u>	<u>BAHAMA AIR</u>	<u>(800) 438-7554</u>
<u>CCA</u>	<u>AIR CHINA</u>	<u>(718) 751-2261</u>
<u>CES</u>	<u>CHINA EASTERN AIRLINES</u>	<u>(310) 646-1849</u>
<u>CHQ</u>	<u>CHAUTAUQUA AIR</u>	<u>(317) 471-2250</u>
<u>CPA</u>	<u>CATHAY PACIFIC</u>	<u>(917) 717-7116</u>
<u>CPZ</u>	<u>COMPASS AIR</u>	<u>(314) 517-0317</u>
<u>CSN</u>	<u>CHINA SOUTHERN AIRLINES</u>	<u>(310) 808-3833</u>
<u>DAL</u>	<u>DELTA AIRLINES</u>	<u>(404) 715-3252</u>
<u>DHL</u>	<u>DHL AIR CARGO</u>	<u>(859) 905-1543</u>
<u>DLH</u>	<u>LUFTHANSA</u>	<u>011 (49) 696 962 620</u>
<u>EAI</u>	<u>EVERGREEN</u>	<u>(503) 472-7982</u>
<u>EDT</u>	<u>ETIHAD AIRLINES</u>	<u>011 (971) (2) 511-1236</u>
<u>EDV</u>	<u>ENDEAVOR AIR</u>	<u>(612) 266-1225</u>
<u>EGF</u>	<u>AMERICAN EAGLE</u>	<u>(817) 967-8405</u>
<u>EIN</u>	<u>AIR LINGUS</u>	<u>(347) 545-5332</u>
<u>EJA</u>	<u>EXEC JET</u>	<u>(614) 239-2630</u>
<u>EJM</u>	<u>JET SPEED (EXEC JET MGMT CO)</u>	<u>(513) 979-6620</u>
<u>ENY</u>	<u>ENVOY</u>	<u>(817) 967-8400</u>
<u>ETH</u>	<u>ETHIOPIAN AIRLINES</u>	<u>011 (251) 11517 8205</u>
<u>EWB</u>	<u>EMERY WORLDWIDE</u>	<u>(650) 596-7400</u>
<u>FDX</u>	<u>FEDERAL EXPRESS</u>	<u>(901) 397-8454</u>
<u>FFT</u>	<u>FRONTIER AIRLINES</u>	<u>(303) 576-1380</u>
<u>FIN</u>	<u>FINNAIR</u>	<u>011 (358) (98) 185 851</u>
<u>GJS</u>	<u>GO JET AIRLINES</u>	<u>(314) 222-4378</u>
<u>GTI</u>	<u>ATLAS AIR</u>	<u>(914) 701-8546</u>
<u>HAL</u>	<u>HAWAIIAN AIRLINES</u>	<u>(808) 838-5566</u>
<u>IBK</u>	<u>NORWEGIAN AIRLINES</u>	<u>011 (476) 759-3070</u>
<u>IDENTIFIER</u>	<u>AIRLINE</u>	<u>TELEPHONE</u>
<u>ICE</u>	<u>ICELANDAIR</u>	<u>(354) 425-0274</u>
<u>JAL</u>	<u>JAPAN AIRLINES</u>	<u>(718) 751-5301</u>
<u>JBU</u>	<u>JET BLUE AIRLINE</u>	<u>(718) 709-3770</u>
<u>JIA</u>	<u>BLUESTREAK</u>	<u>(937) 665-2805</u>
<u>JZA</u>	<u>JAZZ AIRLINES</u>	<u>(902) 873-5957</u>
<u>KAL</u>	<u>KOREAN AIR</u>	<u>(718) 751-2070</u>
<u>KAP</u>	<u>CAPE AIR</u>	<u>(508) 775-4171</u>
<u>KLM</u>	<u>KLM – ROYAL DUTCH</u>	<u>011 (31) 20 304 1101</u>

<u>LAN</u>	<u>LATAM-CHILE</u>	<u>(786) 348-1151</u>
<u>LOF</u>	<u>TRANS STATES AIRLINES</u>	<u>(314) 222-4367</u>
<u>LXJ</u>	<u>FLEX JET AIRLINES</u>	<u>(972) 720-2771</u>
<u>MSR</u>	<u>EGYPT AIRLINES</u>	<u>(202) 634-6480</u>
<u>MXA</u>	<u>MEXICANA</u>	<u>011 (52) (555) 571-3390</u>
<u>NKS</u>	<u>SPIRIT AIRLINES</u>	<u>(954) 447-7834</u>
<u>OAE</u>	<u>OMNI AIRLINES</u>	<u>(918) 831-3058</u>
<u>PAC</u>	<u>POLAR AIR CARGO</u>	<u>(914) 701-8546</u>
<u>PDT</u>	<u>PIEDMONT AIRLINE</u>	<u>(410) 341-3090</u>
<u>PLM</u>	<u>WAMOS AIRLINES</u>	<u>011 (34) 9112 69299</u>
<u>QFA</u>	<u>QANTAS AIRLINES</u>	<u>011 (61) 2 6961 1639</u>
<u>QTR</u>	<u>QATARI AIRLINES</u>	<u>011 (974) 4018 4500</u>
<u>QXE</u>	<u>HORIZON AIR</u>	<u>(206) 988-9560</u>
<u>RPA</u>	<u>REPUBLIC AIRLINES</u>	<u>(317) 471-2022</u>
<u>SAA</u>	<u>SOUTH AFRICAN AIRLINES</u>	<u>011 (27) 1197 83316</u>
<u>SAS</u>	<u>SCANDINAVIAN AIR</u>	<u>(718) 917-0548</u>
<u>SCA</u>	<u>SUN COUNTRY</u>	<u>(651) 681-4855</u>
<u>SIA</u>	<u>SINGAPORE AIRLINE</u>	<u>(604) 276-8039</u>
<u>SKW</u>	<u>SKYWEST AIRLINES</u>	<u>(435) 634-3971</u>
<u>SVA</u>	<u>SAUDIA AIRLINES</u>	<u>(718) 995-4421</u>
<u>SWA</u>	<u>SOUTHWEST AIRLINES</u>	<u>(469) 603-0180</u>
<u>SWR</u>	<u>SWISSAIR</u>	<u>(718) 751-4988</u>
<u>TAI</u>	<u>TACA AIRLINES</u>	<u>(305) 526-6795</u>
<u>TAP</u>	<u>TAP AIR PORTUGAL</u>	<u>011 (351) 2184-15125</u>
<u>TCV</u>	<u>COPA AIRLINES</u>	<u>(507) 304-2873</u>
<u>THY</u>	<u>TURKISH AIRLINES</u>	<u>(718) 751-2605</u>
<u>UAE</u>	<u>EMIRATES</u>	<u>(718) 751-4666</u>
<u>UAL</u>	<u>UNITED AIRLINES</u>	<u>(847) 700-3389</u>
<u>UPS</u>	<u>UNITED PARCEL SERVICE</u>	<u>(502) 359-5100</u>
<u>VOI</u>	<u>VOLARIS AIRLINES</u>	<u>011 (52) (551) 105-2300</u>
<u>VRD</u>	<u>VIRGIN AMERICA</u>	<u>(650) 762-7200</u>
<u>WJA</u>	<u>WEST JET</u>	<u>(403) 444-2455</u>

NEW

Delete

1. PARAGRAPH NUMBER AND TITLE:

2-1-32. REPORTING INOPERATIVE OR MALFUNCTIONING ADS-B TRANSMITTERS

2. BACKGROUND: FAA Flight Standards Service (AFS), Safety Standards Division is responsible for working with aircraft operators to correct Automatic Dependent Surveillance-Broadcast (ADS-B) malfunctions. A requirement was added in 2017 to FAA Order JO 7110.65 for air traffic controllers to report an inoperative or malfunctioning ADS-B transmitter to their supervisor; however, no corresponding follow-up requirement was created in FAA Order JO 7210.3 for management to forward this information.

3. CHANGE:**OLD****NEW**

Add

2-1-32. REPORTING INOPERATIVE OR MALFUNCTIONING ADS-B TRANSMITTERS

Add

FAA Flight Standards Service (AFS), Safety Standards Division is responsible for working with aircraft operators to correct ADS-B malfunctions. Reports of inoperative or malfunctioning ADS-B transmitters must be forwarded to adsbfocusteam@faa.gov and must include the following information:

Add

a. The aircraft identification used for the flight;

Add

b. Location of the occurrence;

Add

c. Date and time of the occurrence (UTC); and

Add

d. Any additional information or observations that may be pertinent or helpful to AFS in their investigation.

Add

NOTE-

The intent of this paragraph is to capture ADS-B anomalies observed by ATC, such as errors in the data (other than Call Sign Mis-Match events, which are detected and reported to AFS automatically) or instances when civil ADS-B transmissions would normally be expected but are not received (e.g., ADS-B transmissions were observed on a previous flight leg).

Add

REFERENCE-

FAA Order JO 7210.3, Para 5-4-2, Requests for Deviation from ADS-B Out Requirements.

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

FAA Order JO 7110.65, Para 5-2-22, Inoperative or Malfunctioning ADS-B Transmitter.

FAA Order JO 7110.65, Para 5-2-23, ADS-B Alerts.

FAA Order JO 7110.65, Para 5-2-24, ADS-B Out OFF Operations.

2-1-32 through 2-1-39**Renumber 2-1-33 through 2-1-40****1. PARAGRAPH NUMBER AND TITLE:**

2-1-41. DISPLAYING DEBRIS RESPONSE AREAS ON THE SITUATION DISPLAY

18-4-7. SPACE LAUNCH OR REENTRY VEHICLE MISHAPS

2. BACKGROUND: The Acceptable Level of Risk (ALR) Review Team Subgroup on Contingency Procedures was tasked with developing ATC procedures for a contingency response to a space vehicle mishap in the NAS.

3. CHANGE:**OLD**

Add

Add

Add

NEW**2-1-41. DISPLAYING DEBRIS RESPONSE AREAS ON THE SITUATION DISPLAY**

Facility ATMs must develop a means to ensure that, when possible, debris response areas (DRA) are displayable on operational situation displays at the start of a launch or reentry window.

NOTE-

The intent of this requirement is to allow controllers to quickly display a DRA if it is activated. If technical limitations prevent the DRA from being drawn on the operational situation display in advance of a space operation, such as if the DRA would cover an entire sector or facility, then an alternative means of providing the needed geographic area of the DRA to the controller must be used. This could be accomplished using the TSD, a paper map, or some other means.

OLD

Add

Add

Add

NEW**18-4-7. SPACE LAUNCH OR REENTRY VEHICLE MISHAPS**

a. A debris-generating space launch or reentry vehicle mishap is an emergency situation in the NAS. All efforts should be made to safely mitigate aircraft exposure to falling debris.

b. Upon notification of a debris-generating space launch or reentry vehicle mishap, or the activation of a debris response area (DRA), the ARTCC/Terminal TMU whose geographic area of responsibility is impacted must, to the extent possible, take actions to help mitigate aircraft exposure to falling debris.

1. PARAGRAPH NUMBER AND TITLE:

2-3-3. REQUIREMENTS

6-1-2. SECTORS

2. BACKGROUND: Air Traffic Services (AJT) initiated a change to operational control position definitions per Notice JO N 7210.930, effective April 1, 2021. Subsequent policy consideration resulted in a determination to revise FAA Order JO 7210.3, Facility Operation and Administration, paragraphs 2-3-3, Requirements, and 6-1-2, Sectors, to more clearly define what constituted an “operational/control” position, and to better ensure the paragraphs aligned with the Federal Aviation Administration (FAA)/National Air Traffic Controllers Association (NATCA) collective bargaining agreement.

3. CHANGE:**OLD****2-3-3. REQUIREMENTS****Title through b1(b)**

(c) TMCs/STMCs required to maintain currency on operational positions within the traffic management unit (TMU), and control positions outside the TMU (dual currency), must maintain currency on a minimum of two operational/control positions outside the TMU.

NOTE-

Operational/control positions are: Local and/or Ground (Tower), Satellite Radar, Departure Radar, Arrival Radar and/or Final Radar (TRACON), Radar Position, Radar Associate Position and/or Non Radar (En Route).

OLD**6-1-2. SECTORS****Title through b1(b)**

The basic unit in each area of operation is the sector. Sectors are classified as Radar, Non-Radar, or Oceanic and sub-classified by altitude strata.

NEW**2-3-3. REQUIREMENTS**

No Change

No Change

NOTE-

Operational/control positions are: Local and/or Ground (Tower), Satellite Radar, Departure Radar, Arrival Radar and/or Final Radar (TRACON), Radar Position, Radar Associate Position and/or ATOP Position (ARTCC).

NEW**6-1-2. SECTORS**

No Change

The basic unit in each area of operation is the sector. Sectors are classified as **one Radar and one Radar Associate**, or **one ATOP Position**.

1. PARAGRAPH NUMBER AND TITLE:**3-3-11. HEADSET TONE INCIDENTS****APPENDIX 5. CHECKLIST FOR REPORTED HEADSET TONE INCIDENTS**

2. BACKGROUND: FAA Order JO 7210.3, Facility Operation and Administration, paragraph 3-3-11, Headset Tone Incidents, contains procedures for handling these incidents. Referenced sources for complying with this requirement have been updated.

3. CHANGE:**OLD****3-3-11. HEADSET TONE INCIDENTS****Title through a**

b. If an employee wishes to file a claim due to a headset tone, the OS/CIC will ensure reporting is done in accordance with FAA Order 3900.19 Paragraph 702, Reporting Mishaps.

NOTE-

Headset tone incidents are automatically reported to the Environmental and Occupational Safety and Health (EOSH) Safety and Environmental Compliance Manager (SECM) through the SMIS.

NEW**3-3-11. HEADSET TONE INCIDENTS**

No Change

b. If an employee wishes to file a claim due to a headset tone, the OS/CIC will ensure reporting is done in accordance with FAA Order 3900.19, **Chapter 3, Recording and Reporting Occupational Injuries and Illnesses**.

NOTE-

1. *Headset tone incidents are automatically reported to the Environmental and Occupational Safety and Health (EOSH) Safety and Environmental Compliance Manager (SECM) through the SMIS.*

Add

REFERENCE–
 FAA Order 3900.19, FAA Occupational Safety and Health Program.

OLD

Appendix 5. Checklist for Reported Headset Tone Incidents

This form will be completed by the operations supervisor (OS)/controller-in-charge (CIC) and will be retained by the employee's OS for a period of 1 year.

2. All FAA employees must file Injury and Illness Incident Reports (OSHA Form 301) electronically via the Department of Labor's (DOL) Employees' Compensation Operations & Management Portal (ECOMP). FAA employees file CA-1/CA-2/CA-7/CA-16 claims forms via ECOMP.

REFERENCE–
 FAA Order 3900.19, Federal Aviation Administration (FAA) Occupational Safety and Health (OSH) Policy.

NEW

Appendix 5. Checklist for Reported Headset Tone Incidents

This form will be completed by the operations supervisor (OS)/controller-in-charge (CIC) and **must** be retained by the employee's OS for a period of 1 year.

OLD

Checklist Requirement for Headset Tone Incidents	OS/CIC Initials
Ensure that Technical Operations is notified to evaluate the affected operational position and associated NAS equipment for normal operations as soon as possible.	
Secure the affected headset for testing by <u>the</u> facility Air Traffic Management. <i>Note: The affected employee and their union representative will be given the opportunity to observe the headset testing.</i>	
Secure the recording of the tone incident. <i>Note: FAA Tech Ops may use the recording to conduct a root-cause analysis.</i>	
Record the incident on FAA Form 7230-4, Facility <u>Log</u> , using the “E” entry. <i>Note: Carry the item on the facility log until headset testing <u>is</u> completed.</i>	
When headset testing is complete, annotate the facility log using an “E” entry with the statement, “Tests complete. (Record test results).” Report any abnormal test results (headset or other communications equipment), as appropriate, on <u>the facility log</u> . <i>Note: The ATM <u>will</u> ensure headsets which fail the headset testing are secured and, within 30 days, contact the <u>2nd level Engineering Office, AJW-173, at (405)954-0066 for instructions to return the headset to the manufacturer.</u></i>	
Update the Safety Management Information System (SMIS) to reflect the headset tone incident.	
Determine if the employee intends to file a DOL Form CA-1, <i>Federal Employee’s Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation</i> . The facility supervisor will assist the employee in filing DOL Form CA-1, if requested. <i>Note: <u>DOL Form CA-1 (with instruction sheets) can be obtained from the DOL web site https://www.dol.gov/owcp/dfec/regs/compliance/forms/htm.</u></i>	
If any employee wishes to be medically evaluated due to a headset incident, complete DOL Form CA-16, <i>Authorization for Medical Treatment</i> , in accordance with the Federal Employee Compensation Act (FECA).	

NEW

Checklist Requirement for Headset Tone Incidents	OS/CIC Initials
Ensure that Technical Operations is notified to evaluate the affected operational position and associated NAS equipment for normal operations as soon as possible.	
Secure the affected headset for testing by facility Air Traffic Management. <i>Note: The affected employee and their union representative will be given the opportunity to observe the headset testing.</i>	
Secure the recording of the headset tone incident. <i>Note: FAA Tech Ops may use the recording to conduct a root-cause analysis.</i>	
Record the incident on FAA Form 7230-4, Daily Record of Facility Operation , using the “E” entry. <i>Note: Carry the item on the facility log until headset testing has been completed.</i>	
When headset testing is complete, annotate the facility log using an “E” entry with the statement, “Tests complete. (Record test results).” Report any abnormal test results (headset or other communications equipment), as appropriate, on FAA Form 7230-4, Daily Record of Facility Operation . <i>Note: The ATM must ensure headsets which fail the headset testing are secured and, within 30 days, contact the Oklahoma Communications Engineering Team, AIW-173, at (405) 954-0066 for instructions to return the headset to the manufacturer.</i>	
Update the Safety Management Information System (SMIS) to reflect the headset tone incident.	
Determine if the employee intends to file a DOL Form CA-1, <i>Federal Employee’s Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation</i> . The facility supervisor will assist the employee in filing DOL Form CA-1, if requested. <i>Note: FAA employees file CA-1 claims forms via ECOMP.</i>	
If any employee wishes to be medically evaluated due to a headset tone incident, complete DOL Form CA-16, <i>Authorization for Medical Treatment</i> , in accordance with the Federal Employee Compensation Act (FECA). <i>Note: FAA employees file CA-16 claims forms via ECOMP.</i>	

1. PARAGRAPH NUMBER AND TITLE: 5-1-1. ADVANCE COORDINATION

2. BACKGROUND: Procedures for advance coordination of Presidential visits located in JO 7210.3, Facility Operation and Administration, paragraph 5-1-1, and JO 7610.4, Special Operations, paragraph 14-2-1, contain some duplicative language and have been in need of updates and improved alignment. This Document Change Proposal (DCP) will keep JO 7210.3, paragraph 5-1-1, intact, with updates and edits for clarity, and add some relocated procedures from JO 7610.4, paragraph 14-2-1. In a separate DCP, the duplicative language in JO 7610.4, paragraph 14-2-1, is deleted (with the exception of the opening NOTE) and the paragraph modified to include updated sensitive information pertinent to the advance coordination of Presidential visits.

3. CHANGE:**OLD****5-1-1. ADVANCE COORDINATION****NOTE-**

Presidential aircraft and entourage, referred to herein, include aircraft and entourage of the President, the Vice President, or other public figures designated by the White House.

a. An advance survey group comprised of representatives of the Office of the Military Assistant to the President, the U.S. Secret Service, the White House Staff, and a Presidential Advance Agent may visit each location the Presidential aircraft will transit. The visit is normally made several days in advance of the trip to determine security aspects and the availability of supporting services. On this visit the group may meet with the airport operator, the ATCT manager, and other interested parties. Based on the evaluation by this group, a decision is made on the use of the airport, and further coordination is planned for an advance group.

b. The advance group, comprised of representatives of the same organizations stated in subparagraph a, will meet with the same airport elements to complete security measures and supporting services and determine the necessary restrictions to air traffic operations before the arrival and the departure of the Presidential aircraft and while the Presidential entourage is at the airport. The security provisions may include stationing a guard in the tower cab or at the tower entrance and maintaining two-way communications between the control tower and agents on the ground. This meeting will be held several days in advance of the planned arrival of the Presidential aircraft. The advance group has been requested to have all elements of the group coordinate with the FAA simultaneously.

NEW**5-1-1. ADVANCE COORDINATION****NOTE-**

Presidential aircraft and entourage, referred to herein, include aircraft and entourage of the President, the Vice President, or other public figures designated by the White House. These parties may also be referred to as very important persons (VIP).

a. An advance survey group comprised of representatives of the Office of the Military Assistant to the President, the U.S. Secret Service (USSS), the White House Staff, and a Presidential Advance Agent may visit each ATC facility the Presidential aircraft will transit. The visit is normally made several days in advance of the trip to determine security aspects and the availability of supporting services. On this visit the group may meet with the airport operator, the air traffic manager (ATM), and other interested parties. Based on the evaluation by this group, a decision is made on the use of the airport, and further coordination is planned for the advance group as described in subparagraph b.

No Change

Add

Add

1. The air traffic manager must appoint an air traffic supervisor to serve as coordinator who will be responsible for attending all meetings and briefing all affected personnel. Additionally, the coordinator must brief the ATCSCC and the appropriate ARTCC of any traffic delays or restrictions.

2. All advance coordination must be documented, with special attention given to routes, radio frequencies, and assigned transponder codes. This documentation must be made available to the personnel on duty who will be handling the Presidential movement.

3. The meeting must be attended by the ATCT manager, the coordinator, and, if available, the supervisory specialist(s) who will be on duty and directly involved in the control of airport traffic during the arrival and departure, and while the Presidential entourage is on the airport.

4. The air traffic manager must take whatever steps are necessary to ensure that the Presidential flight, airplanes, helicopters, and entourage is given priority. Restrictions will be placed upon normal air traffic operations to provide priority unless directed otherwise by the Presidential advance agent (USAF) or the Secret Service representative; the latter when the Presidential advance agent (USAF) is not directly involved. ATCT personnel must be guided by the determinations of the advance group and must cooperate to the maximum extent possible. The air traffic manager must consider the following alternatives:

Add

(a) Employing air traffic control techniques to temporarily adjust or suspend the movement of traffic to accommodate the arrival and the departure of the Presidential aircraft and while the Presidential entourage is on the airport.

c. In addition to the responsibilities described in this paragraph, additional advance coordination requirements and information are located in JO 7610.4. Responsibilities include the following:

REFERENCE–

FAA Order JO 7610.4, Para 14–2–1, Advance Coordination.

1. The ATM must appoint an air traffic supervisor to serve as coordinator who will be responsible for attending all meetings and briefing all affected personnel. Additionally, the coordinator must brief the ATCSCC, the appropriate ARTCC, **and other affected ATC facilities within their jurisdiction** of any traffic delays or restrictions.

No Change

3. The meeting must be attended by the ATM, the coordinator, and, if available, the supervisory specialist(s) who will be on duty and directly involved in the control of airport traffic during the arrival and departure, and while the Presidential entourage is on the airport.

4. The ATM must take whatever steps are necessary to ensure that the Presidential flight, **Presidential support aircraft**, and entourage **are** given priority. Restrictions will be placed upon normal air traffic operations to provide priority unless directed otherwise **by the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC). Air traffic** personnel must be guided by the determinations of the advance group and must cooperate to the maximum extent possible.

5. The ATM must also consider the following measures:

(a) Employing air traffic control techniques to temporarily adjust **(e.g., change runway configurations)** or suspend the movement of traffic to accommodate the arrival and departure of the Presidential aircraft, and while the Presidential entourage is on the airport.

(b) Requesting traffic, by NOTAM, to voluntarily conform to restrictions in the vicinity of an airport. The NOTAM must give the approximate time of the restrictions and should be cleared by the advance group. It must avoid any reference to presidential activities and must be issued at least 8 hours in advance.

EXAMPLE–

ALL TRAFFIC CAN EXPECT DELAYS FROM (date/time) TO (date/time) AND FROM (date/time) TO (date/time).

(c) The time will normally be 15 minutes before to 15 minutes after the arrival and the departure time.

Add

(b) Requesting traffic, by NOTAM (**separate from the TFR NOTAM**), to voluntarily conform to restrictions in the vicinity of an airport. The NOTAM must give the approximate time of the restrictions and should be cleared by the advance group. It must avoid any reference to presidential activities and must be issued at least 8 hours in advance.

No Change

No Change

(d) Advising airport management to ask aircraft operators to consider pre-positioning to other airports outside of the TFR area while the TFR is in effect in order to reduce the economic or other adverse impacts to those operators.

1. PARAGRAPH NUMBER AND TITLE:

5–4–10. AIRCRAFT CALL SIGNS USED FOR SENSITIVE GOVERNMENT FLIGHTS

2. BACKGROUND: Air traffic control (ATC) facilities have encountered situations in the operational environment regarding certain U.S. special call signs used for sensitive governmental flight missions. This document change proposal (DCP) relocates, with modifications, the call sign inquiry procedures from paragraph 12 of password-protected FAA Order JO 7110.67, Air Traffic Management Security Services for Special Operations, to enable easier access for ATC facilities.

3. CHANGE:

OLD

Add

Add

Add

NEW

5–4–10. AIRCRAFT CALL SIGNS USED FOR SENSITIVE GOVERNMENT FLIGHTS

a. ATO System Operations Security assigns and authorizes U.S. special call signs and beacon codes for flights used by federal (non-DOD), state, local, tribal, and territorial government agencies for the specific purpose of conducting sensitive operations in the NAS, such as law enforcement and surveillance missions. These call signs and beacon codes are not published for security reasons.

NOTE–

This paragraph is not applicable to military call signs, which are a responsibility of the DoD.

Add	<u>b. ATC may contact the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC) for immediate issues regarding a particular U.S. special call sign or beacon code used by an aircraft for a sensitive mission.</u>
Add	<u>NOTE–</u> <u>The DEN ATSC may not possess knowledge of a specific mission.</u>
Add	<u>c. Non-urgent issues regarding the use of U.S. special call signs can be addressed to ATO System Operations Security via email at 9-ATOR-HQ-IFOS@faa.gov.</u>
Add	<u>REFERENCE–</u> <u>FAA Order JO 7110.67, Air Traffic Management Security Services for Special Operations.</u>

1. PARAGRAPH NUMBER AND TITLE: 6–7–4. FACILITY MANAGER RESPONSIBILITIES

2. BACKGROUND: The evolution of the En Route Automation Modernization (ERAM) system has made some legacy terminology obsolete. The Hold Data Menu, an application within ERAM, has matured and rendered the Hold Annotation Menu obsolete.

3. CHANGE:

<u>OLD</u>	<u>NEW</u>
6–7–4. FACILITY MANAGER RESPONSIBILITIES	6–7–4. FACILITY MANAGER RESPONSIBILITIES
Title through b8	No Change
9. Facility standard for annotating hold instructions and reporting delay information at sectors. Facility directives may require either the use of the <u>EDST</u> Hold Data Menu/Hold view, <u>the Hold Annotations Menu</u> , flight progress strips, or a facility-approved worksheet, and must define a standard for each sector.	9. Facility standard for annotating hold instructions and reporting delay information at sectors. Facility directives may require either the use of the <u>ERAM</u> Hold Data Menu, <u>ERAM</u> Hold view, flight progress strips, or a facility-approved worksheet, and must define a standard for each sector.

1. PARAGRAPH NUMBER AND TITLE:**8–2–7. WAIVER TO INTERIM ALTITUDE REQUIREMENTS**

2. BACKGROUND: Facility managers may waive the requirement for controllers to update the data block with a temporary altitude when sector volume or complexities warrant such an action. Although “waiver” is in the title of the paragraph, this action does not need to go through the normal waiver approval process. It may be put in place with a facility directive. The introduction of the En Route Automation Modernization (ERAM) Local Interim Altitude (LIA) functionality created ambiguity because the paragraph only points to FAA Order JO 7110.65, subparagraphs 5–14–3(b) (interim altitude), and not subparagraph (d), which is the paragraph that speaks to the LIA, another form of interim altitude. Additionally it was identified that the paragraph also pointed to subparagraph (a), (assigned altitude), which was inadvertently added to this paragraph in 2015 when FAA Order JO 7210.630C, Procedural Guidance for FAA Order JO 7210.3 following En Route Modernization (ERAM) Implementation was incorporated into FAA Order JO 7210.3.

3. CHANGE:**OLD****8–2–7. WAIVER TO INTERIM ALTITUDE REQUIREMENTS**

Where sector conditions; e.g., heavy traffic or sector complexity, preclude meeting the requirements of FAA Order JO 7110.65, Air Traffic Control, subparagraph 5–14–3a3(a)(b), Computer Entry of Flight Plan Information, ARTCC air traffic managers may authorize the deletion of the requirements if an operational advantage is gained. A facility directive must be issued with instructions governing permissible procedures. It must contain:

- a. Procedures/sectors where the waiver applies.

NEW**8–2–7. INTERIM ALTITUDE FACILITY DIRECTIVE REQUIREMENTS**

Where sector conditions (e.g., heavy traffic or sector complexity) preclude meeting the requirements of FAA Order JO 7110.65, Air Traffic Control, **paragraph** 5–14–3, Computer Entry of Flight Plan Information, ARTCC air traffic managers may authorize **exceptions to** the requirement **to update the data block with a temporary altitude** if an operational advantage is gained. A facility directive must be issued with instructions governing permissible procedures. It must contain:

- a. Procedures/sectors where the **directive** applies.

1. PARAGRAPH NUMBER AND TITLE: 12–10–5. UAS FACILITY MAP (UASFM) DESIGN

2. BACKGROUND: There are two methods by which ATC facilities make and/or request altitude changes to their Unmanned Aircraft Systems Facility Map (UASFM); (1) the UASFM web-based tool; (2) the process established with HQ AJV–A, as contained in JO 7210.3, subparagraph 12–10–5f. The changes made via the web-based platform are processed electronically and are immediately reflected on the facility UASFM. As a contractual requirement the UAS Service Supplier(s) must update their data bases no later than 24 hours after the map modification has been submitted. Also, the web-based changes rescind existing authorizations that do not conform the new altitude value. The changes requested via the HQ AJV–A UASFM process are manually processed and are updated with the chart supplement on the 56–day publication schedule.

3. CHANGE:**OLD****12–10–5. UAS FACILITY MAP (UASFM) DESIGN**

Add

NEW**12–10–5. PROCEDURES TO CHANGE UAS FACILITY MAP (UASFM) ALTITUDES**

Facilities must use one of the following methods when making/requesting changes to their UASFM grid values:

a. Each facility will need three files: a facility map (.pdf), a Google Earth (.kmz) file, and a spreadsheet (.xls). To receive the files, send an email to uasfm@faa.gov.

Add

Add

b. The map will display the facility's airspace as defined in FAA Order JO 7400.11, Airspace Designations and Reporting Points. A latitude/longitude grid will be placed over the maps creating rectangular divisions, referred to as "segments". The map will have a satellite image as its background. (See FIG 12-10-1.)

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a. Changes made using the web-based tool <https://uasfm.faa.gov> are immediately reflected on the facility UASFM. The UAS Service Suppliers (USS) have up to 24 hours after the changes are submitted to update their database.

1. The UASFM web-based tool can only be accessed using Google Chrome or Microsoft Edge web browsers.

2. To obtain access, facilities must follow the instructions contained on the UASFM web-based tool homepage.

b. Coordinate changes through HQ AJV-A utilizing the following procedures:

1. Request files via the uasfm@faa.gov email address.

2. Complete the Excel spreadsheet, inputting information on sheet 1 only. Altitude values must be 0-400 in 50 foot increments.

3 Evaluate all segments that are fully or partially contained within the lateral boundary of your airspace.

4. Save completed worksheet as XXX.xls, in which XXX is the facility ID.

5. Return the completed spreadsheet to uasfm@faa.gov include the following information in the email:

(a) Use only your facility ID in the subject line.

(b) Attach the spreadsheet.

(c) List your Map POC(s) (name, email address, phone number).

(d) List your authorization POC(s) (name, email address, and phone number).

(e) Date UASFM completed.

c. A .kmz file is a file that opens using Google Earth Pro. It is not a requirement to use a .kmz file, but the .kmz file may be easier to work with because of the program's zoom and pan feature. The facility map is a .pdf file of the .kmz. If the facility does not have Google Earth Pro, contact the IT department for program installation. The FAA facilities IT support number is 1-844-322-6948.

Delete

d. Each segment will be identified by a letter and number. The latitude segments will be labeled with letters and will increase by one for each segment (A, B, etc.). The longitude segments will be labeled with 1 and increase by one for each segment (1, 2, etc.).

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e. Assign each segment a value of 0-400 feet, in 50-foot increments. Only evaluate segments that are within the surface area of your Class B/C/D airspace. Leave the segments outside the surface area blank. In the event that a surrounding facility owns or abuts your surface area, you must work with that facility (i.e., TRACON owns 1 mile from the runway.) Only complete sheet 1 of the spreadsheet. Sheet 2 and sheet 3 self-populate and the data must not be changed. They will be used to develop a Google Earth graphical overlay. (See FIG 12-10-2.)

Delete

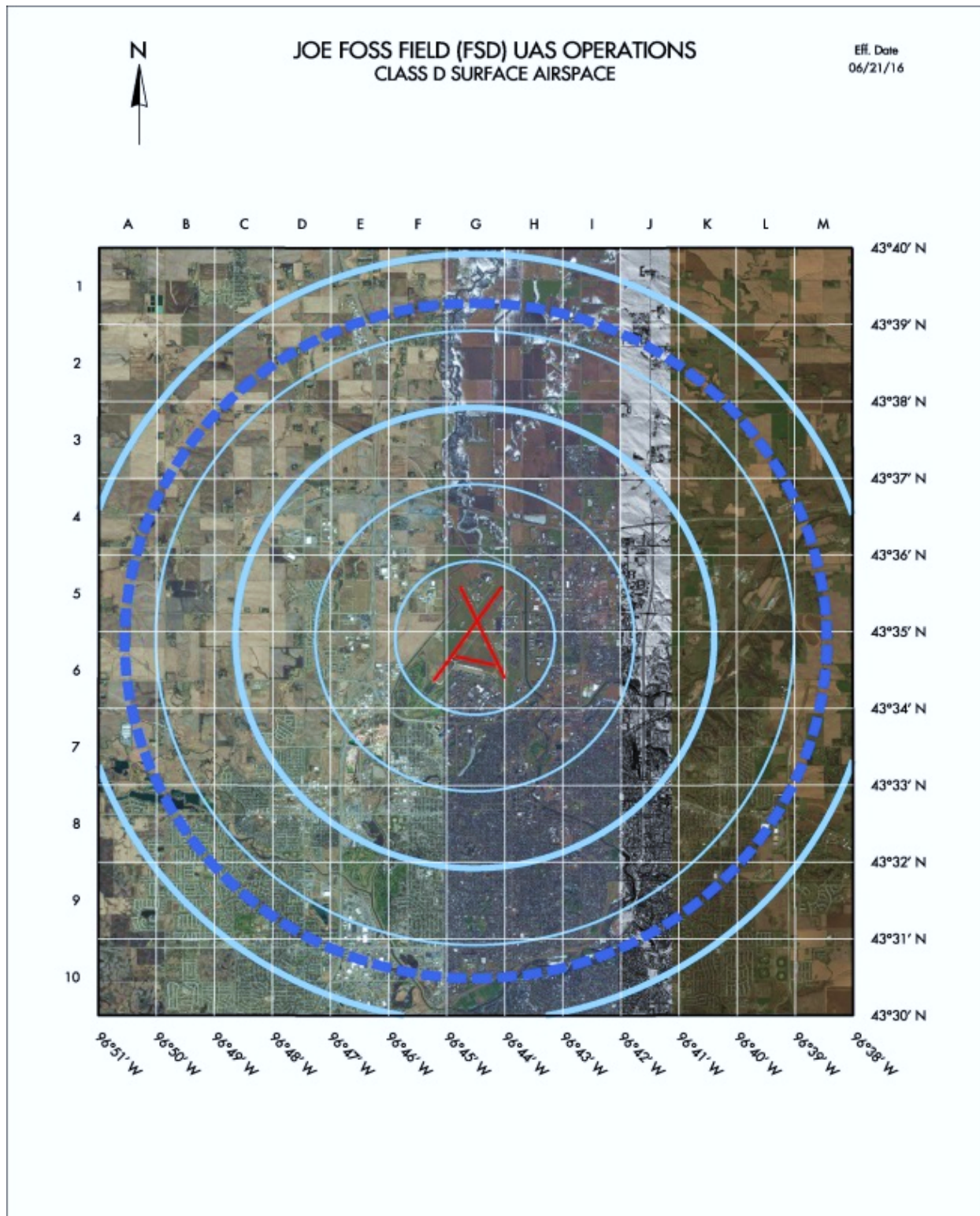
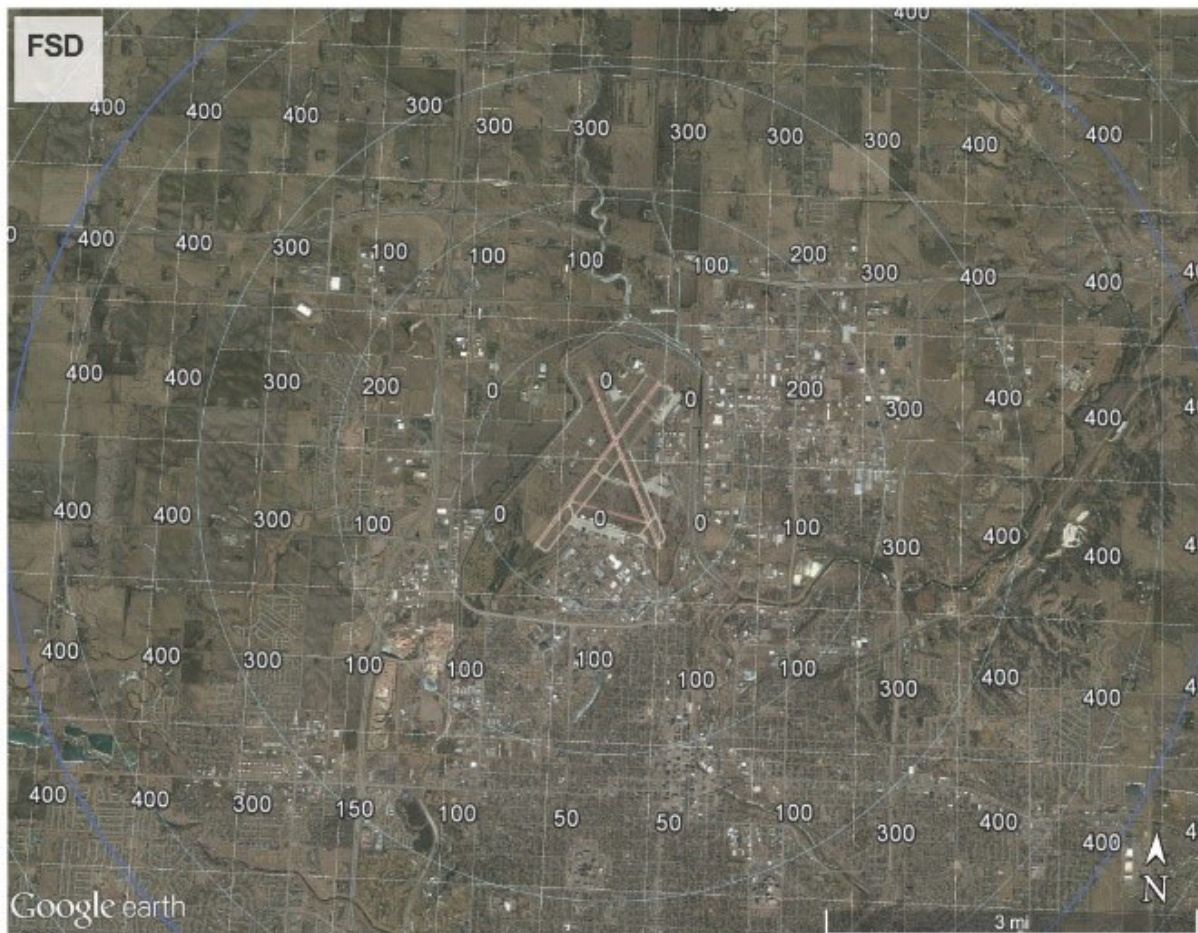
OLD**FIG 12-10-1****Background Satellite Image**

FIG 12-10-1
Google Earth Graphical Overlay



NEW

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f. UASFM Checklist.

- 1. Request files from uasfm@faa.gov.**
- 2. Complete the spreadsheet, working collaboratively. Only input information onto sheet 1. Values must be 0–400 in 50–foot increments.**
- 3. Evaluate all segments that are fully or partially contained within the lateral boundary of your airspace.**
- 4. Save completed worksheet as XXX.xls, in which XXX is the facility ID.**

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<u>5. Return completed spreadsheet to uasfm@faa.gov.</u>	Delete
<u>6. Include in the email:</u>	Delete
<u>(a) Use only your facility ID in the subject line.</u>	Delete
<u>(b) Attach the spreadsheet.</u>	Delete
<u>(c) List your Map POC(s) (Name, Email Address, Phone).</u>	Delete
<u>(d) List your Authorization POC(s) (Name, Email Address, Phone).</u>	Delete
<u>(e) Date UASFM completed.</u>	Delete

1. PARAGRAPH NUMBER AND TITLE: 18–10–4. DEFINITIONS

2. BACKGROUND: FAA Order JO 7210.3, Facility Operation and Administration, Chapter 18, Section 10, Ground Delay Programs, paragraph 18–10–4. Definitions, requires addition of Unified Ground Delay Program (UDP), which is the preferred method when implementing a Ground Delay Program (GDP).

3. CHANGE:

<u>OLD</u>	<u>NEW</u>
18–10–4. DEFINITIONS	18–10–4. DEFINITIONS
Title through c	No Change
Add	<u>d. Unified Ground Delay Program (UDP). This program type addresses the mix of scheduled and unscheduled (i.e., pop-ups) demand based on the following parameters: number of reserved pop-ups, target delay multiplier, and delay limit.</u>

1. PARAGRAPH NUMBER AND TITLE: Appendix 6. Commercial Space LOA Sample Templates

2. BACKGROUND: In 2020, policy was updated to include commercial space letter of agreement templates in Appendix 6.

3. CHANGE:

<u>OLD</u>	<u>NEW</u>
Appendix 6. Commercial Space LOA Sample Templates	Appendix 6. Commercial Space LOA Sample Templates

OLD

**[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations,
[Operator]**

Letter of Agreement

Effective:

Subject: Coordination of [Operator] Launch/Reentry Operations from [name and location of Launch and (if applicable) Reentry site]

1. Purpose:

State the purpose of the Letters of Agreement (LOA), type of operation (launch, launch with reentry), and location of operation (name and location of launch and (if applicable) Reentry site). If LOA is for a one-time operation, state that.

Sample text:

This Letters of Agreement (LOA) provides procedures for the integration and appropriate coordination of [licensed/permitted] [*Vehicle Type*: horizontal/vertical] [launch/launch with reentry/hover-test] operations into the National Airspace System (NAS) from [name and location of launch and (if applicable) Reentry site].

2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled].
State agreement to review LOA annually.

Sample text:

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the [license/permit] or when modifications are made to the [license/permit].

3. Scope:

List the pertinent ATC facilities, Operator, and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities as applicable. State distribution of the LOA. The distribution should include, at a minimum, all signatories and the Office of Commercial Space Transportation (AST).

Sample Text:

This LOA is pertinent to [ATC facilities], [additional stakeholders], and [Operator]. It is to be distributed to all signatories and stakeholders].

4. Responsibilities:

State the responsibilities of the Operator, lead ATC facility, and as needed, any other stakeholders and/or affected facilities.

- a. Operator must fulfill requirements provided in the Sample Text for this section.
- b. Lead ATC facility must fulfill requirements provided in the Sample Text for this section and
 1. Fill out the Points of Contact Table (Attachment B).
 2. Fill out the Actions Timetable (Attachment C)
- c. (*As needed*) Other stakeholders and affected facilities must:
 1. Ensure appropriate personnel are aware of the provisions of this agreement.

Sample text:

- a. [Operator] must:
 1. Ensure all Operator [and their designees] personnel operating within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement.
 2. Establish, make available, and be prepared to execute approved contingency plan(s).
 - a) Unless an established contingency plan has been approved by all necessary parties, [Operator] must coordinate requirements and get approval from [lead ATC facility] for contingency plan(s) at least [XX] calendar days prior to each operation.

3. Follow the procedures in Section 5 and the Action Timetable (Attachment C) with regards to communications and notifications.

4. Notify the parties in the Points of Contact Table (Attachment B) immediately if scheduled operations are cancelled.

5. (*As needed*) Develop separate agreements with foreign Air Navigation Service Providers when airspace coordination outside of the U.S. Flight Information Region is needed for the operation.

b. [Lead ATC facility] must:

1. Ensure all personnel responsible for providing air traffic service within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement. This includes notification to other affected facilities.

2. Ensure appropriate [lead ATC facility] personnel are aware of and prepared to execute approved contingency plan(s).

3. Communicate with necessary facilities and ascertain their readiness to execute approved contingency plan(s).

4. Except when real time notifications of actual start of activity and end of activity times are provided to the facility via ATO Space Operations coordination, take appropriate actions to restrict airspace use during the effective times of the aircraft hazard area(s).

5. Take additional measures for public safety deemed necessary by 14 CFR Parts 400–460.

c. (*As needed*) [Other stakeholders and affected facilities] must:

1. Ensure appropriate personnel are aware of the provisions of this agreement.

2. Ensure appropriate personnel are aware of and prepared to execute approved contingency plan(s).

d. Deviations from responsibilities and/or procedures established in this LOA must be coordinated prior to each operation, and responsibilities must be clearly defined in each case.

5. Procedures:

Specify timeline and details for activities to take place prior to, during, and upon completion of operation.

Specify frequency of proposed operations and any limitations when considering dates and times of operations. Include any restrictions on days of week and/or times of day operations that may or may not occur. Restrictions may include times when military operations require use of certain airspace.

Specify procedure(s) for handling anomalies and emergencies. Information conveyed should include the location of event (latitude and longitude, represented as degree–minute–second), vehicle state, projected time the hazard will no longer be present, and any other pertinent details.

Sample text:

a. [Operator] must:

1. Provide a Launch/Reentry Forecast Package to the parties specified in the Points of Contact Table (Attachment B), except CARF, at least once every [XX] months. These forecasts will include a best estimate of all anticipated launches for the upcoming [XX] months.

2. Provide [lead ATC facility] a pre–planning package a minimum of [XX] calendar days prior to the planned operation. At a minimum, the package should include:

a) The launch/reentry window.

b) The best estimate of the geographic definition of the hazard area(s) (latitude and longitude, represented as degree–minute–second) for the primary date and any back–up date(s).

c) (*As needed*) Any support aircraft's type and call sign.

3. (*As needed*) Submit Altitude Reservation (ALTRV) request(s) to CARF (and email a copy of the request to the [lead ATC facility]) a minimum of [XX] days prior to the planned operation.

4. Verify the issuance of the appropriate NOTAMs.

5. No less than [XX] minutes in advance of a planned operation, notification will be given by [Operator] to [lead ATC facility] of intent for the [launch/hover–test] to take place.

6. During the operation, a [Operator] representative must participate on an FAA Hotline teleconference with [lead ATC facility] and ATO Space Operations (see Actions Timetable, Attachment C, for phone number). Communication on the FAA Hotline teleconference must be established no less than [XX] minutes prior to planned operation.

a) The [Operator] representative must be able to provide real-time verbal indications of the status of the operation, its progress along the launch/reentry trajectory, and occurrence of significant events.

b) Participation by representative(s) from [other stakeholders and affected facilities] is advised.

7. Notify [lead ATC facility] upon completion of the operation.

8. (As needed) Contact CARF and request that the appropriate ALTRVs be cancelled.

9. In the event of an anomaly, a [Operator] representative must immediately notify [lead ATC facility], via FAA Hotline teleconference, of the occurrence of the anomaly. Information communicated should include, at a minimum:

a) The last known state of the vehicle.

b) The location of the off-nominal event (latitude and longitude, represented as degree-minute-second).

c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) (when known).

d) Projected time the hazard(s) will no longer be present (when known).

e) Other information that will provide estimated positions of hazards.

10. In the event of an emergency, [Operator] must immediately contact [lead ATC facility], via FAA Hotline teleconference and email all the parties listed in the Points of Contact Table (Attachment B). Information conveyed should include, at a minimum:

a) The last known state of the vehicle.

b) The location of the event (latitude and longitude, represented as degree-minute-second).

c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) (when known).

d) Projected time the hazard(s) will no longer be present (when known).

e) Other information that will provide estimated positions of hazards.

b. [Lead ATC facility]:

1. Upon notification of a completed operation, [lead ATC facility] must cancel appropriate airspace restrictions and/or NOTAMs.

2. In the event when [lead ATC facility] becomes aware of a condition that would make the launch/reentry unsafe, [lead ATC facility] must immediately contact, via FAA Hotline, [Operator] and all other parties listed in the Points of Contact Table (Attachment B).

6. Attachments

A. Signatures

B. Points of Contact Table

C. Actions Timetable

D. Graphics/Maps

- Launch/Reentry Site Description/Map
- Aircraft Hazard Area Description/Map
- Temporary Flight Restriction Description/Map
- Air Traffic Control Assigned Airspace Description/Map

E. Commercial Launch/Reentry Site LOA

Attachment A: Signatures

[Lead ATC Facility]

[Operator]

[ATO Space Operations]

[as appropriate, other stakeholders, including Federal Ranges and military facilities]

Attachment B: Points of Contact Table

The following table should be completed by the [lead ATC facility] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[Operator]			
[Lead ATC Facility] Supervisor in Charge			
[Lead ATC Facility] Traffic Management Unit			
ATO Space Operations			
Central Altitude Reservation Function (CARF)			
National Traffic Management Office (NTMO)			

Attachment C: Actions Timetable

The following table should be completed by [lead ATC facility]. In coordination with the [lead ATC facility], [Operator] must ensure that the following actions are completed at the defined intervals.

Time	Event	Remarks	Date Completed
T – [XX] months Suggestion: T – 6 months	Submit Launch/reentry Forecast Package	Operator should provide best estimate of all known launch/reentry dates for upcoming six months.	
T – [XX] calendar days Suggestion: T – 30 – 60 calendar days	Coordinate launch/reentry corridor/hazard area(s)	Operator should coordinate with ATO Space Operations and as appropriate, other affected facilities.	
T – [XX] calendar days Suggestion: T – 10 calendar days	Submit Pre-Planning Package	Operator should provide a description of the Aircraft Hazard Area(s), along with date(s) and time(s) for launch/reentry.	

Time	Event	Remarks	Date Completed
T – [XX] calendar days Suggestion: T – 5 – 14 calendar days	File an Altitude Reservation (ALTRV) request with CARF (as needed)	Operator is responsible for coordinating all necessary ALTRV requests. Requests should be submitted via email to _____@FAA.gov A copy of the request should also be emailed to [lead ATC facility]. Contact:	
T – [XX] hours	Verify issuance of appropriate airspace notices (NOTAMs and TFRs)	Operator should contact [lead ATC facility] for issuance of TFR(s) and NOTAM(s) (as needed). Per 14 CFR § 91.143, TFRs need to be issued at least ____ hours in advance of the scheduled operation.	
T – [XX] hours and repeat again at T – [XX] hours Suggestion: T – 24 hours and 3 hours	Provide operational status report	Operator contacts [lead ATC facility] via [telephone/email] and provides operational status report, which includes confirmation of intent and specifics of operation.	
T – [XX] minutes Suggestion: T – 60 – 30 minutes	Establish Hotline connection	[FAA Hotline telephone #] The operation will be delayed or terminated if the Operator does not establish communications via FAA Hotline teleconference. Operator must have a representative on the FAA Hotline teleconference until the operation is complete.	
T – [XX] minutes Suggestion: T – 30 minutes	Provide operational status report	Operator provides operational status report. This report includes confirmation that the operation will take place as scheduled. As necessary, Operator should continue to communicate any significant operational changes.	

Time	Event	Remarks	Date Completed
T – [XX] minutes and repeat at T – [XX] minutes Suggestion: T – 10 minutes and T – 5 minutes	Receive final clearance or confirmation of continued approved mission status	Operator must receive clearance or confirmation of continued approved mission status from [<u>lead ATC facility</u>] to proceed with operation.	
During operation	Maintain real-time communication via FAA Hotline teleconference	Operator must provide real-time verbal indications on the status of the vehicle.	
Post-operation or mission cancellation	Notify ATC and CARF (if applicable) of completion or cancellation of operation	ATC must be notified when operation is complete. TFR(s), ALTRV(s), and any other necessary notices should be cancelled as soon as practicable.	
	Schedule post-operation debrief	A debrief should occur ideally within __ hours, but no later than __ hours of the completion of the operation. A debrief should be conducted even if no off-nominal activity occurred.	

Instructions for Letter of Agreement Template: Launch and Reentry Site

Letter of Agreement

Effective:

Subject: Operations at [Name and location of Launch and Reentry Site]

1. Purpose:

State the purpose of the Letters of Agreement (LOA), type(s) of anticipated operation (*if launch*: [horizontal/vertical]) [launch/reentry], frequency of proposed operation(s) (if known), and name and location of Launch and Reentry Site.

Sample text:

This LOA establishes a framework for the coordination and planning of procedures for [licensed/permitted] (*if launch*: [horizontal/vertical]) [launch/reentry] operations into the National Airspace System from [name and location of Launch and Reentry Site].

2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

Sample text:

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the license or when modifications are made to the license.

3. Scope:

List the affected ATC facilities; Launch/Reentry Site Operator; and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities, as applicable.

State that this LOA does not guarantee the approval of operations from the Launch and Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate letter of agreement with each Vehicle Operator.

State that this LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

State distribution of the LOA. The distribution should include, at a minimum, all signatories.

Sample text:

This LOA is pertinent to [ATC facilities and stakeholders; including ATO Space Operations] and [Launch/Reentry Site Operator]. It does not guarantee the approval of operations from the Launch/Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate LOA with each Vehicle Operator.

This LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

This LOA is to be distributed to the signatories, additional stakeholders, and the Office of Commercial Space Transportation (AST).

4. Responsibilities:

State the responsibilities of the Site Operator, lead ATC Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

a. Procedures for notification and scheduling of operations, to include procedures for the issuance of Notices to Air Missions, Altitude Reservations and Special Activity Airspace access.

b. Plans for communication between the operator and the FAA as necessary, before, during, and after a scheduled operation.

**[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations,
[Launch and Reentry Site Operator]**

- c. Plans and procedures for cancellations, contingencies, and emergencies.
- d. Plans and procedures for any other measures deemed necessary by the FAA to ensure public health and safety.

Sample text:

a. [Launch/Reentry Site Operator] is responsible for the management, operation, and maintenance of the Launch/Reentry Site. This includes the coordination with users of its facility and the responsibility for ensuring all necessary information regarding operations is provided to the appropriate ATC facilities.

b. The FAA is responsible for the safe, orderly, and expeditious flow of known air traffic under its control. It is also responsible for the dissemination of pertinent information to the aviation community.

c. All parties named in this LOA will work collaboratively to develop procedures and other such measures deemed necessary to protect public health and safety.

5. Attachments

State the responsibilities of the Site Operator, lead ATC Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

- A. Signatures
- B. Points of Contact Table
- C. Graphics/Maps
 - Physical Site Description/Map
 - Airspace Description/Map(s)

**[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations,
[Launch and Reentry Site Operator]**

Attachment A: Signatures

[Lead ATC Facility]

[Launch/Reentry Site Operator]

[ATO Space Operations]

[As appropriate, other stakeholders, including Federal Ranges and military facilities.]

**[Name(s) of affected Air Traffic Control Facilities (lead facility listed first)], ATO Space Operations,
[Launch and Reentry Site Operator]**

Attachment B: Points of Contact Table

The following table should be completed by the [lead ATC facility] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[<u>Primary ATC Facility</u>] Airspace and Procedures Office			
[<u>Primary ATC Facility</u>] Traffic Management Unit			
ATO Space Operations			
[Launch and Reentry Site Operator]			

NEW**[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Operator]****Letter of Agreement**

Effective:

Subject: Coordination of [Operator] Launch/Reentry Operations from [name and location of Launch and (if applicable) Reentry site]

1. Purpose:

State the purpose of the Letters of Agreement (LOA), type of operation (launch, launch with reentry), and location of operation (name and location of launch and (if applicable) Reentry site). If LOA is for a one-time operation, state that.

Sample text:

This Letters of Agreement (LOA) provides procedures for the integration and appropriate coordination of [licensed/permitted] [*Vehicle Type*: horizontal/vertical] [launch/launch with reentry/hover-test] operations into the National Airspace System (NAS) from [name and location of launch and (if applicable) Reentry site].

2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

Sample text:

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the [license/permit] or when modifications are made to the [license/permit].

3. Scope:

List the pertinent ATC facilities, Operator, and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities as applicable. State distribution of the LOA. The distribution should include, at a minimum, all signatories and the Office of Commercial Space Transportation (AST).

Sample Text:

This LOA is pertinent to [ATC facilities], [additional stakeholders], and [Operator]. It is to be distributed to all signatories and stakeholders].

4. Responsibilities:

State the responsibilities of the Operator, **Controlling Facility**, and as needed, any other stakeholders and/or affected facilities.

- a. Operator must fulfill requirements provided in the Sample Text for this section.
- b. **Controlling Facility** must fulfill requirements provided in the Sample Text for this section and
 1. Fill out the Points of Contact Table (Attachment B).
 2. Fill out the Actions Timetable (Attachment C)
- c. (*As needed*) Other stakeholders and affected facilities must:
 1. Ensure appropriate personnel are aware of the provisions of this agreement.

*Sample text **for Operator**:*

- a. [Operator] must:
 1. Ensure all Operator [and their designees] personnel operating within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement.
 2. Establish, make available, and be prepared to execute approved contingency plan(s).
 - a) Unless an established contingency plan has been approved by all necessary parties, [Operator] must coordinate requirements and get approval from [**Controlling Facility**] for contingency plan(s) at least [XX] calendar days prior to each operation.

3. Follow the procedures in Section 5 and the Action Timetable (Attachment C) with regards to communications and notifications.

4. Notify the parties in the Points of Contact Table (Attachment B) immediately if scheduled operations are cancelled.

5. *(As needed)* Develop separate agreements with foreign Air Navigation Service Providers when airspace coordination outside of the U.S. Flight Information Region is needed for the operation.

Sample text for Controlling Facility:

b. **[Controlling Facility]** must:

1. Ensure all personnel responsible for providing air traffic service within the scope of this agreement are knowledgeable of, understand, and comply with the provisions of this agreement. This includes notification to other affected facilities.

2. Ensure appropriate **[Controlling Facility]** personnel are aware of and prepared to execute approved contingency plan(s).

3. Communicate with necessary facilities and ascertain their readiness to execute approved contingency plan(s).

4. Except when real time notifications of actual start of activity and end of activity times are provided to the facility via ATO Space Operations coordination, take appropriate actions to restrict airspace use during the effective times of the aircraft hazard area(s).

5. Take additional measures for public safety deemed necessary by 14 CFR Parts 400–460.

Sample text as needed:

c. *(As needed)* [Other stakeholders and affected facilities] must:

1. Ensure appropriate personnel are aware of the provisions of this agreement.

2. Ensure appropriate personnel are aware of and prepared to execute approved contingency plan(s).

d. Deviations from responsibilities and/or procedures established in this LOA must be coordinated prior to each operation, and responsibilities must be clearly defined in each case.

5. Procedures:

Specify timeline and details for activities to take place prior to, during, and upon completion of operation.

Specify frequency of proposed operations and any limitations when considering dates and times of operations. Include any restrictions on days of week and/or times of day operations that may or may not occur. Restrictions may include times when military operations require use of certain airspace. Specify procedure(s) for handling anomalies and emergencies. Information conveyed should include the location of event (latitude and longitude, represented as degree–minute–second) **(when available)**, vehicle state, projected time the hazard will no longer be present, and any other pertinent details.

Sample text:

a. [Operator] must:

1. Provide a Launch/Reentry Forecast Package to the parties specified in the Points of Contact Table (Attachment B), except **Central Altitude Reservation Facility (CARF)**, at least once every [XX] months. These forecasts will include a best estimate of all anticipated launches for the upcoming [XX] months.

2. Provide **[Controlling Facility]** a pre–planning package a minimum of [XX] calendar days prior to the planned operation. At a minimum, the package should include:

a) The launch/reentry window.

b) The best estimate of the geographic definition of the hazard area(s) (latitude and longitude, represented as degree–minute–second) **(when available)** for the primary date and any back–up date(s).

c) *(As needed)* Any support aircraft's type and call sign.

3. *(As needed)* Submit Altitude Reservation (ALTRV) request(s) to CARF (and email a copy of the request to the **[Controlling Facility]**) a minimum of [XX] days prior to the planned operation.

4. Verify the issuance of the appropriate NOTAMs.

5. No less than [XX] minutes in advance of a planned operation, notification will be given by [Operator] to **[Controlling Facility]** of intent for the [launch/hover-test] to take place.

6. During the operation, a [Operator] representative must participate on an FAA Hotline teleconference with **[Controlling Facility]** and ATO Space Operations (see Actions Timetable, Attachment C, for phone number). Communication on the FAA Hotline teleconference must be established no less than [XX] minutes prior to planned operation.

a) The [Operator] representative must be able to provide real-time verbal indications of the status of the operation, its progress along the launch/reentry trajectory, and occurrence of significant events.

b) Participation by representative(s) from [other stakeholders and affected facilities] is advised.

7. Notify **[Controlling Facility]** upon completion of the operation.

8. *(As needed)* Contact CARF and request that the appropriate ALTRVs be cancelled.

9. In the event of an anomaly, a [Operator] representative must immediately notify **[Controlling Facility]**, via FAA Hotline teleconference, of the occurrence of the anomaly. Information communicated should include, at a minimum:

a) The last known state of the vehicle.

b) The location of the off-nominal event (latitude and longitude, represented as degree-minute-second) **(when available)**.

c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) **(when available)**.

d) Projected time the hazard(s) will no longer be present (when known).

e) Other information that will provide estimated positions of hazards.

10. In the event of an emergency, [Operator] must immediately contact **[Controlling Facility]**, via FAA Hotline teleconference and email all the parties listed in the Points of Contact Table (Attachment B). Information conveyed should include, at a minimum:

a) The last known state of the vehicle.

b) The location of the event (latitude and longitude, represented as degree-minute-second) **(when available)**.

c) The predicted location(s) impacted (latitude and longitude, represented as degree-minute-second) **(when available)**.

d) Projected time the hazard(s) will no longer be present (when known).

e) Other information that will provide estimated positions of hazards.

b. **[Controlling Facility]**:

1. Upon notification of a completed operation, **[Controlling Facility]** must cancel appropriate airspace restrictions and/or NOTAMs.

2. In the event when **[Controlling Facility]** becomes aware of a condition that would make the launch/reentry unsafe, **[Controlling Facility]** must immediately contact, via FAA Hotline, [Operator] and all other parties listed in the Points of Contact Table (Attachment B).

6. Attachments

a. Signatures

b. Points of Contact Table

c. Actions Timetable

d. Only include graphics that are applicable to this scenario:

- Launch/Reentry Site Description/Map
- Aircraft Hazard Area Description/Map

- Temporary Flight Restriction Description/Map
- Air Traffic Control Assigned Airspace Description/Map
- e. Commercial Launch/Reentry Site LOA

Attachment A: Signatures

[Controlling Facility]

[Operator]

[ATO Space Operations]

[as appropriate, other stakeholders, including Federal Ranges and military facilities]

Attachment B: Points of Contact Table

The following table should be completed by the [**Controlling Facility**] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[Operator]			
[Controlling Facility] Supervisor in Charge			
[Controlling Facility] Traffic Management Unit			
ATO Space Operations			
Central Altitude Reservation Function (CARF)			
National Traffic Management Office (NTMO)			

Attachment C: Actions Timetable

The following table should be completed by [**Controlling Facility**]. In coordination with the [**Controlling Facility**], [Operator] must ensure that the following actions are completed at the defined intervals.

Time	Event	Remarks	Date Completed
T – [XX] months Suggestion: T – 6 months	Submit Launch/reentry Forecast Package	Operator should provide best estimate of all known launch/reentry dates for upcoming six months.	
T – [XX] calendar days Suggestion: T – 30 – 60 calendar days	Coordinate launch/reentry corridor/hazard area(s)	Operator should coordinate with ATO Space Operations and as appropriate, other affected facilities.	
T – [XX] calendar days Suggestion: T – 10 calendar days	Submit Pre-Planning Package	Operator should provide a description of the Aircraft Hazard Area(s), along with date(s) and time(s) for launch/reentry.	

Time	Event	Remarks	Date Completed
T – [XX] calendar days Suggestion: T – 5 – 14 calendar days	File an Altitude Reservation (ALTRV) request with CARF (as needed)	<p>Operator is responsible for coordinating all necessary ALTRV requests. Requests should be submitted via email to _____@FAA.gov A copy of the request should also be emailed to [Controlling Facility].</p> <p>Contact:</p>	
T – [XX] hours	Verify issuance of appropriate airspace notices (NOTAMs and TFRs)	<p>Operator should contact [Controlling Facility] for issuance of TFR(s) and NOTAM(s) (as needed).</p> <p>Per 14 CFR § 91.143, TFRs need to be issued at least ____ hours in advance of the scheduled operation.</p>	
T – [XX] hours and repeat again at T – [XX] hours Suggestion: T – 24 hours and 3 hours	Provide operational status report	<p>Operator contacts [Controlling Facility] via [telephone/email] and provides operational status report, which includes confirmation of intent and specifics of operation.</p>	
T – [XX] minutes Suggestion: T – 60 – 30 minutes	Establish Hotline connection	<p>[FAA Hotline telephone #]</p> <p>The operation will be delayed or terminated if the Operator does not establish communications via FAA Hotline teleconference.</p> <p>Operator must have a representative on the FAA Hotline teleconference until the operation is complete.</p>	
T – [XX] minutes Suggestion: T – 30 minutes	Provide operational status report	<p>Operator provides operational status report. This report includes confirmation that the operation will take place as scheduled.</p> <p>As necessary, Operator should continue to communicate any significant operational changes.</p>	

Time	Event	Remarks	Date Completed
T – [XX] minutes and repeat at T – [XX] minutes Suggestion: T – 10 minutes and T – 5 minutes	Receive final clearance or confirmation of continued approved mission status	Operator must receive clearance or confirmation of continued approved mission status from [Controlling Facility] to proceed with operation.	
During operation	Maintain real-time communication via FAA Hotline teleconference	Operator must provide real-time verbal indications on the status of the vehicle.	
Post-operation or mission cancellation	Notify ATC and CARF (if applicable) of completion or cancellation of operation	ATC must be notified when operation is complete. TFR(s), ALTRV(s), and any other necessary notices should be cancelled as soon as practicable.	
	Schedule post-operation debrief	A debrief should occur ideally within __ hours, but no later than __ hours of the completion of the operation. A debrief should be conducted even if no off-nominal activity occurred.	

Instructions for Letter of Agreement Template: Launch and Reentry Site

Letter of Agreement

Effective:

Subject: Operations at [Name and location of Launch and Reentry Site]

1. Purpose:

State the purpose of the Letters of Agreement (LOA), type(s) of anticipated operation (*if launch*: [horizontal/vertical]) [launch/reentry], frequency of proposed operation(s) (if known), and name and location of Launch and Reentry Site.

Sample text:

This LOA establishes a framework for the coordination and planning of procedures for [licensed/permitted] (*if launch*: [horizontal/vertical]) [launch/reentry] operations into the National Airspace System from [name and location of Launch and Reentry Site].

2. Cancellation:

Include any previous LOA canceled by this one [Subject and Effective Date of LOA being cancelled]. State agreement to review LOA annually.

Sample text:

This LOA will remain in effect until cancelled by any signatory entity and will be reviewed annually throughout the life of the license or when modifications are made to the license.

3. Scope:

List the affected ATC facilities; Launch/Reentry Site Operator; and any additional stakeholders, including ATO Space Operations, Federal Ranges, and military facilities, as applicable.

State that this LOA does not guarantee the approval of operations from the Launch and Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate letter of agreement with each Vehicle Operator.

State that this LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

State distribution of the LOA. The distribution should include, at a minimum, all signatories.

Sample text:

This LOA is pertinent to [ATC facilities and stakeholders; including ATO Space Operations] and [Launch/Reentry Site Operator]. It does not guarantee the approval of operations from the Launch/Reentry Site. Once a Vehicle Operator has been identified and its operations approved, responsibilities and procedures will be outlined in a separate LOA with each Vehicle Operator.

This LOA does not confer any proprietary, property, or exclusive right in the use of airspace or outer space referenced in Code of Federal Regulation (CFR) 420.41.

This LOA is to be distributed to the signatories, additional stakeholders, and the Office of Commercial Space Transportation (AST).

4. Responsibilities:

State the responsibilities of the Site Operator, **Controlling Facility**, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

a. Procedures for notification and scheduling of operations, to include procedures for the issuance of Notices to Air Missions, Altitude Reservations and Special Activity Airspace access.

b. Plans for communication between the operator and the FAA as necessary, before, during, and after a scheduled operation.

[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Launch and Reentry Site Operator]

- c. Plans and procedures for cancellations, contingencies, and emergencies.
- d. Plans and procedures for any other measures deemed necessary by the FAA to ensure public health and safety.

Sample text:

a. [Launch/Reentry Site Operator] is responsible for the management, operation, and maintenance of the Launch/Reentry Site. This includes the coordination with users of its facility and the responsibility for ensuring all necessary information regarding operations is provided to the appropriate ATC facilities.

b. The FAA is responsible for the safe, orderly, and expeditious flow of known air traffic under its control. It is also responsible for the dissemination of pertinent information to the aviation community.

c. All parties named in this LOA will work collaboratively to develop procedures and other such measures deemed necessary to protect public health and safety.

5. Attachments

State the responsibilities of the Site Operator, Controlling Facility, and as needed, any other stakeholders and/or affected facilities. All parties named within this letter of agreement will work collaboratively to develop the following:

- A. Signatures
- B. Points of Contact Table
- C. Graphics/Maps
 - Physical Site Description/Map
 - Airspace Description/Map(s)

[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Launch and Reentry Site Operator]

Attachment A: Signatures

[Controlling Facility]

[Launch/Reentry Site Operator]

[ATO Space Operations]

[As appropriate, other stakeholders, including Federal Ranges and military facilities.]

[Name(s) of affected Air Traffic Control Facilities (Controlling Facility listed first)], ATO Space Operations, [Launch and Reentry Site Operator]

Attachment B: Points of Contact Table

The following table should be completed by the [Controlling Facility] and the information should be verified prior to every operation.

Office	Phone #	Email	Responsibility
[<u>Controlling Facility</u>] Airspace and Procedures Office			
[<u>Controlling Facility</u>] Traffic Management Unit			
ATO Space Operations			
[Launch and Reentry Site Operator]			
