CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

JO 7210.3Z
CHG 1

Effective Date:
05/26/16

SUBJ: Facility Operation and Administration

1. Purpose of This Change. This change transmits revised pages to Federal Aviation Administration Order JO 7210.3Z, Facility Operation and Administration, and the Briefing Guide.

2. Audience. This change applies to all Air Traffic Organization (ATO) personnel and anyone using ATO directives.

3. Where Can I Find This Change? This change is available on the FAA Web site at http://faa.gov/air_traffic/publications 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 Retain this transmittal until superseded by a new basic order.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.

Elizabeth L. Ray

Elizabeth L. Ray *Original Signature on File*
Vice President, Mission Support Services
Air Traffic Organization

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

Explanation of Changes
Change 1

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

a. 1-2-4. ABBREVIATIONS
2-4-1. SERVICE HOURS
3-4-2. ASSIGNMENT OF RECORDER CHANNELS
4-6-6. FAA FORM 7230-10, POSITION LOG
13-1-1. OPERATING POSITION DESIGNATORS
13-2-3. POSITIONS/SERVICES
14-1-2. CERTIFICATES OF AUTHORITY
Chapter 14, Section 3. En Route Flight Advisory Service (EFAS)
16-2-1. AIRCRAFT CONTACTED
16-5-2. EFAS MONTHLY REPORT
16-5-3. DISTRIBUTION AND AMENDMENT
Chapter 16, Section 6. FSS Printing of Lists and Tallies (Model 1 Full Capacity)
16-17-3. TALLIES PRINTING

This change reflects the migration of the En Route Flight Advisory Service responsibilities into In-Flight and the discontinued use of the term "Flight Watch" within the CONUS and Puerto Rico.

b. 1-2-4. ABBREVIATIONS
5-2-2. FLIGHT INSPECTION AIRCRAFT
6-4-2. MINIMUM IFR ALTITUDES (MIA)
8-3-1. DIGITAL MAP VERIFICATION
10-3-6. ILS HEIGHT/DISTANCE LIMITATIONS
11-2-10. DIGITAL MAP VERIFICATION
11-8-10. DIGITAL MAP VERIFICATION

This change reflects the Technical Operations reorganization.

c. 2-1-6. CHECKING ACCURACY OF PUBLISHED DATA
2-2-11. PERSONNEL BRIEFINGS REGARDING ORDER CHANGES

This change ensures aeronautical data is included in the products to review with respect to each publication cycle, directs the briefing of any facility directive affected by any additions or changes, and identifies Internet references where aeronautical information may be obtained. Additionally, this change adds guidance on briefing of additions and changes to published aeronautical data and flight procedures that will likely have an effect on a facility's air traffic service.

d. 2-1-9. HANDLING MANPADS INCIDENTS

This change adds ATC reporting requirements to the DEN for any MANPADS threat and provides clarifications through general edits to the paragraph.

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

This change updates the paragraph title to "Reporting Suspicious Aircraft/Pilot Activity" and adds the specific ATC facility requirements for reporting suspicious aircraft/pilot activity. Also added is a new requirement for ATC to report to the DEN any general aviation arriving from international points that requests to divert from its original destination airport.

f. 2-1-32. TRANSPORTATION SECURITY ADMINISTRATION AND FAA JOINT OPERATING PROCEDURES

This change adds TSA and FAA joint operating procedures.

g. 2-2-8. GENOT HANDLING

This change incorporates the GENOT distribution procedures found in JO N7210.612 and corrects the titles of the cited lines of business to reflect current ATO structure.

h. 3-3-4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHZ

This change deletes guidance that normally the ARTCC emergency frequency capability must be limited to the transceiver/receiver site nearest the ARTCC.

i. 3-5-3. PROCESSING GPS ANOMALY REPORTS

This change updates the Technical Operations offices responsible for processing GPS anomaly reports.

j. 3-6-2. RADAR USE

This change provides procedural guidance for facilities providing ATC services using ADS-B and WAM as surveillance sources.

k. 3-9-1. COLOR USE ON ATC DISPLAYS

This change eliminates the discrepancy between the STARS SSS requirement for some maps to be yellow and the FAA Order 7210.3 requirement for all maps to be dim gray.

l. 4-2-2. PILOT EDUCATION

This change reflects the cancellation of FAA Order 7230.17, Pilot Education Program - Operation Takeoff and the deletion of its reference from FAA Order 7210.3.

m. 4-6-4. FAA FORM 7230–4, DAILY RECORD OF FACILITY OPERATION

This change removes the exemption to FAA Contract Towers (FCT) in using the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230–4. It will require all facilities (excluding FAA flight service stations), where FAA telecommunications network capability exists, to begin using the CEDAR based FAA Form 7230-4.

n. 5-3-8. FOREIGN STATE DIPLOMATIC FLIGHTS

This change provides the field with background and contact information regarding foreign state aircraft with diplomatic clearances.

o. 6-1-7. DISPLAY OF TRAFFIC MANAGEMENT ADVISOR (TMA) INFORMATION
17-6-4. TYPES OF TMIs

This change incorporates procedures and responsibilities for the use of TBFM. It defines TBFM and incorporates its vision, purpose, and policy. Additionally, it provides specific directions to facilities as to where to publish display requirements for TBFM metering lists, and/or data block information.

p. 6-2-1. EN ROUTE CONTROLLER TEAM CONCEPT

This change modifies the title and removes a designator that is no longer needed.

q. 6-6-5. MESSAGE CONTENT

This change deletes the aircraft type designator and supplemental information from FAA Order 7340.2 and adds references the new order.

r. 10-1-2. TOWER/RADAR TEAM CONCEPTS

This change deletes subparagraph 10-1-2b and removes the subparagraph designator that is no longer needed.

s. 10-1-7. USE OF ACTIVE RUNWAYS
10-1-8. PROCEDURES FOR OPENING AND CLOSING RUNWAYS

This change outlines mandatory use of memory aids for specific surface operations which can be adapted to individual facilities as required.

t. 10-4-6. SIMULTANEOUS INDEPENDENT APPROACHES

This change provides guidance on where to send glide slope outage contingency plans for approval.

u. 10-4-7. SIMULTANEOUS WIDELY-SPACED PARALLEL OPERATIONS

This change requires facilities to identify in a directive which approach pairings are authorized to be used for each widely-spaced parallel runway operation when conducting simultaneous independent parallel operations with RNAV (RNP) approaches with radius-to-fix (RF) legs.

v. Chapter 11, Section 4. TPX-42

This section is removed in its entirety.

w. 11-9-1. SYSTEM OPERATION

This change adds guidance for facilities using ASDE-X to mitigate nuisance or false construction related alerts. Existing guidance for facilities that have not yet received upgraded ASDE-X software remains unchanged.

x. 11-10-3. CRITERIA
11-10-4. RESPONSIBILITIES

This change removes references to the Airport/Facility Directory and replaces it with FAA Order 7350.9, where appropriate. Additionally, offices and their processes were updated.

y. 17-25-1. PURPOSE
17-25-2. DEFINITIONS
17-25-3. RESPONSIBILITIES
17-25-4. DEFINITIONS
17-25-5. RESPONSIBILITIES

This change incorporates procedures and responsibilities for the use of TBFM. It defines TBFM and incorporates its vision, purpose, and policy for use into the document. It provides specific directions to facilities as to where to publish display requirements for TBFM metering lists, and/or data block information.

z. 18-1-8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE
18-5-1. MOORED BALLOONS, KITES, UNMANNED ROCKETS, AND UNMANNED FREE BALLOONS/OBJECTS

This change provides guidance for integrating parasail operations into the NAS and describes the distribution of approved waivers.

aa. 19-1-8. TFR QUESTIONS
19-2-5. ISSUING TFRS
19-2-7. RESPONSIBILITIES
19-7-3. RESPONSIBILITIES
19-7-5. COORDINATION
19-7-6. SPECIAL TRAFFIC MANAGEMENT PROGRAM GUIDELINES
19-7-8. REVISIONS AND CANCELLATIONS

This change modifies the title “ATO service area manager.”

ab. Entire Publication

A global search and replace was conducted on the term “A/FD – Airport/Facility Directory.” This term is now being referred to as “Chart Supplement U.S.”

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

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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 Services Operations Area Office. 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	Airport arrival rate
ACD	ARTS Color Displays
ACDO	Air Carrier District Office
ACE–IDS	ASOS Controller Equipment–Information Display System
ACID	Aircraft identification
ADC	Aerospace Defense Command
ADIZ	Air defense identification zone
ADL	Aggregate demand list
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
AIT	Automated information transfer
ALD	Available landing distance
ALS	Approach light system
ALTRV	Altitude reservation
AMASS	Airport Movement Area Safety System
APREQ	Approval request
ARFF	Airport rescue and fire fighting
ARINC	Aeronautical Radio, Inc.
ARO	Airport Reservations Office
ARP	Airport reference point
ARSR	Air route surveillance radar

Abbreviation	Meaning
ART	ATO Resource Tool
ARTCC	Air route traffic control center
ARTS	Automated radar terminal system
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
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
ATREP	Air Traffic representative
ATTS	Automated Terminal Tracking Systems
AWC	Aviation Weather Center
AWIS	Automated weather information service
AWOS	Automated Weather Observing System
BAASS	Bigelow Aerospace Advanced Space Studies
CA	Conflict alert
CAP	Civil Air Patrol
CARF	Central Altitude Reservation Function
CARTS	Common ARTS
CAS	Civil Aviation Security
CCFP	Collaborative Convective Forecast Product
CCSD	Collaborative Constraint Situation Display
CD	Clearance delivery
CDM	Collaborative decision making
CDR	Coded Departure Route(s)
CDR	Continuous Data Recording
CERAP	Combined center/RAPCON
CFR	Code of Federal Regulations
CIC	Controller–in–charge
CIRNOT	Circuit Notice
COB	Close of business

Abbreviation	Meaning
CONUS	Continental/Contiguous/Conterminous United States
COO	Chief Operating Officer
COTC	Computer operator terminal console
CPDLC	Controller Pilot Data Link Communications
CTRD	Certified Tower Radar Display
CTA	Controlled times of arrival
CWA	Center weather advisory
CWSU	ARTCC Weather Service Unit
DAS	Delay assignment
DASI	Digital altimeter setting indicator
DCCWU	ATCSCC Weather Unit
DEDS	Data entry display system
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
EPIC	El Paso Intelligence Center
ERIDS	En Route Information Display System
ESL	Emergency service level
ESP	En Route sequencing program
FAA	Federal Aviation Administration
FCA	Flow Constrained Area
FDEP	Flight data entry and printout
FDIO	Flight data input/output
FEA	Flow Evaluation Area
FICO	Flight Inspection Central Operations
FLM	Front–Line Manager
FOIA	Freedom of information act
FOUO	For Official Use Only
FP	Flight plan
FPL	Full performance level
FRD	Fixed Radial Distance

Abbreviation	Meaning
FSA	Flight schedule analyzer
FSDO	Flight Standards district office
FSL	Full service level
FSM	Flight Schedule Monitor
FSS	Flight service station
GA	General aviation
GC	Ground control
GDP	Ground delay program(s)
GENOT	General notice
GI	General information message
GS	Ground stop(s)
HIRL	High intensity runway lights
HRPM	Human Resource Policy Manual
IAFDOF	Inappropriate Altitude for Direction of Flight
ICAO	International Civil Aviation Organization
ICR	Integrated Collaborative Rerouting
ICSS	Integrated communication center
IDS	Information Display System
IFR	Instrument flight rules
IFSS	International flight service station
ILS	Instrument landing system
INS	Immigration and Naturalization Service
IR	IFR MTR
ITWS	Integrated Terminal Weather System
LAA	Local airport advisory
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
MA	Monitor alert
MALS/RAIL	Medium approach light system and runway alignment indicator lights
MAPPS	Management Association for Private Photogrammetric Surveyors
MCI	Mode C intruder
MDM	Main display monitor
MEA	Minimum en route IFR altitude

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

Abbreviation	Meaning
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)
RATCF	Radar Air Traffic Control Facility associated with the United States Navy
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
RVV	Runway visibility value
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
SIA	Status information area
SID	Standard Instrument Departure
SIGMET	Significant meteorological information
SMGCS	Surface movement guidance and control 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
STMCIC	Supervisory Traffic Management Coordinator–in–Charge
STMP	Special traffic management program
SUA	Special use airspace
SVFR	Special visual flight rules
SWAP	Severe weather avoidance plan
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
TDLS	Terminal Data Link System
TDW	Terminal display workstation
TDWR	Terminal Doppler weather radar
TEC	Tower en route control
TELCON	Telephone Conference
TEL–TWEB	Telephone–transcribed weather broadcast
TERPS	Terminal instrument procedures
TFMS	Traffic Flow Management System
TFR	Temporary flight restriction
TIBS	Terminal information broadcast system
TM	Traffic management
TMC	Traffic management coordinator
TMI	Traffic management initiatives
TMU	Traffic management unit
TRACAB	Terminal radar approach control in tower cab
TRACON	Terminal radar approach control
TRSA	Terminal Radar Service Area
TSD	Traffic situation display
TWEB	Transcribed weather broadcast
UFO	Unidentified flying object
UHF	Ultrahigh frequency
UPT	User Preferred Trajectory
USAF	United States Air Force
USN	United States Navy
UTC	Coordinated universal time
VAR	Volcanic activity report
VASI	Visual approach slope indicator
VCE	VSCS/Console Equipment
VEARS	VSCS Emergency Access Radio System
VFR	Visual flight rules
VHF	Very high frequency
VMC	Visual meteorological conditions
VOR	Omnidirectional VHF navigational aid
VORTAC	Collocated VOR and TACAN navigational aid
VR	VFR MTR
VSCS	Voice Switching and Control System
VTABS	Voice switching and control system training and backup system
WARP	Weather and Radar Processing

Chapter 2. Administration of Facilities

Section 1. General

2–1–1. INTERREGIONAL REQUIREMENTS

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

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

2–1–2. FACILITY STANDARD OPERATING PROCEDURES DIRECTIVE

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

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

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

NOTE–
Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/

REFERENCE–
FAAO JO 7210.3, Para 2-1-6, Checking Accuracy of Published Data
FAAO JO 7210.3, Para 4-1-1, Correspondence Standards
FAAO JO 7210.3, Para 4-3-3, Developing LOA
FAAO JO 7210.3, Para 4-3-6, Annual Review/Revisions

2–1–3. POSITION/SECTOR BINDERS

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

2–1–4. REFERENCE FILES

Air traffic managers must maintain current sets of orders, facility directives, Letters of Agreement (LOA), aeronautical charts, pertinent International Civil Aviation Organization (ICAO) documents and related publications so that they may be readily available for operational use and study by facility personnel. Also, the air traffic manager must maintain reference materials at appropriate work areas. These materials must consist of pertinent directives, agreements, emergency and overdue

aircraft procedures, and a location listing of airports within the area of responsibility including runway alignment, lighting, surface, and length as a minimum. Current telephone numbers of user companies/organizations identifying the source who has the capability of contacting no radio (NORDO) aircraft may also be listed. Air traffic managers must determine the applicability of other materials to be included.

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

2–1–5. RELEASE OF INFORMATION

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

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

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

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

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

(a) The agency employee must positively identify the requestor by name, organization or affiliation, and point–of–contact (including a telephone call–back number).

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

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

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

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

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

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

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

2–1–6. CHECKING ACCURACY OF PUBLISHED DATA

Air traffic managers and air traffic representatives (ATREPs) must ensure, upon receipt of official publications, that a review of data pertaining to their facilities and areas of concern is accomplished to

ensure accuracy and completeness. When pertinent national procedures, aeronautical data or flight procedures are created or changed, review facility standard operating procedures (SOPs) directives, position/sector binders, reference files, and/or letters of agreement (LOAs) and initiate corrections and briefings as required.

NOTE–

1. *Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/*

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

a. *https://www.faa.gov/air_traffic/flight_info/aer onav/procedures*

b. *http://aerochart.faa.gov*

3. *Information on aeronautical data changes is available at the National Flight Data Center (NFDC) web portal of which a subscription should be requested, Check NFDD and Transmittal Letters: https://nfdc.faa.gov*

4. *Notice to Airman information may be viewed at: https://notams.aim.faa.gov/notamSear ch/disclaimer.html*

REFERENCE–

FAAO JO 7210.3, Para 2-1-2, Facility Standard Operating Procedures Directive
FAAO JO 7210.3, Para 2-1-3, Position/Sector Binders
FAAO JO 7210.3, Para 2-2-11, Personnel Briefings Regarding Orders, Published Aeronautical Data and Flight Procedures
FAAO JO 7210.3, Para 4-3-3, Developing LOA
FAAO JO 7210.3, Para 4-3-6, Annual Review/Revisions
FAAO JO 7930.2, Notices to Airmen
FAAO JO 8260.19, Flight Procedures and Airspace
FAAO JO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS)
FAAO JO 8260.43, Flight Procedures Management Program

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

Facilities must develop and maintain guidelines to provide continuity of required services during planned (for example, radar out for maintenance, frequency out for repair) or unplanned outages (for example, power failures, natural disasters).

a. For planned outages, facilities must maintain a checklist that provides guidance on approving shutdowns. This checklist should be maintained at an operational manager's position (for example, OMIC desk, FLM desk). Facilities should consider the following for inclusion on the checklist:

1. Traffic volume and complexity.

2. Weather.

3. Alternate means of providing air traffic services.

4. Procedures to notify affected facilities when planned outage begins and ends.

5. Other information related to the planned outage, as appropriate.

b. Facilities must develop and maintain operational plans for unplanned outages that provide continuity of services to the extent dictated by the outage (for example, power failures, fire, flood, storm damage, breakdown of critical system components, facility wide outages). The plans must be in accordance with JO 1900.47.

2–1–8. HANDLING BOMB THREAT INCIDENTS

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

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

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

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

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

e. If the decision is made to evacuate and air safety is a factor, immediately release nonessential personnel, resolve traffic conflicts (aircraft on radar vectors should be cleared to resume normal navigation), instruct aircraft to contact the appropriate facility designated in the facility contingency plan, advise adjacent facilities (ARTCCs should advise the ATCSCC), broadcast that the facility is

being evacuated, and evacuate the building as rapidly as personnel can be released. The appropriate actions should be accomplished quickly to minimize personnel exposure. Further, the air traffic manager or his/her designee will determine which personnel will remain on duty until the traffic situation is resolved. Personnel designated to perform this function normally will be selected from the supervisory ranks or persons volunteering temporary services. To be effective this action should be planned in advance. There are various ways in which this can be accomplished. One simple method is that at the beginning of each watch, supervisors will plan their watch coverage should the need to evacuate arise.

f. The evacuation plans will also include recall procedures.

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

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

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

1. Increase security forces and measures.

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

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

REFERENCE–
FAAO JO 7210.3, Para 2–8–2, Medical Clearance Requirements.

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

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

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

2–1–9. HANDLING MANPADS INCIDENTS

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

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

REFERENCE–
FAAO JO 7110.65, Para 2–9–3, Content.
FAAO JO 7110.65, Para 10–2–13, MANPADS Alert.
FAAO JO 7610.4, Para 16–1–3, Responsibilities.

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

1. Call sign (if known);

2. Type aircraft (if known);

3. Coordinated Universal time;

4. Position/location of event;

5. Altitude (if known); and

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

2–1–10. AIRPORT EMERGENCY PLANS

a. Operational instructions covering airport emergency service at airports served by an ATCT and/or FSS must be issued by the air traffic manager (the ATCT manager at airports with both facilities) in the form of a LOA. Procedures and/or LOAs for alerting

airport emergency equipment at other public–use airports served by the ATCT and/or FSS must also be developed, if deemed appropriate.

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

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

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

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

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

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

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

(a) The FAA specialists on duty.

(b) The pilot of the aircraft concerned.

(c) The operator of the aircraft or his/her representative.

(d) A representative of the airport manage-ment.

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

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

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

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

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

NOTE–
Airport management is responsible for notifying other agencies or personnel.

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

2–1–11. EXPLOSIVES DETECTION K–9 TEAMS

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

a. The facility will relay the pilot's request to the FAA Washington Operations Center, AEO–100, telephone: commercial (202) 267–3333; ETN 521–0111; or DSN 851–3750 providing the aircraft's identification and position.

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

c. After it has been determined that the aircraft wishes to divert to the airport location provided, the air traffic facility will ascertain estimated arrival time and advise AEO–100. AEO–100 will then notify the

appropriate airport authority at the diversion airport. In the event the K–9 team is not available at this airport, AEO–100 will relay this information to the air traffic facility providing them with the secondary location. ATC will then relay this to the pilot concerned for appropriate action.

2–1–12. 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.

2–1–13. AIRCRAFT IDENTIFICATION PROBLEMS

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

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

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

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

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

b. *Military aircraft*: Contact base operations of the departure airport and request that action be taken to have the flight identifications changed when duplicate, phonetically similar, or hard to distinguish call signs are causing a flight identification problem. If additional assistance is required, immediately advise the military representative assigned to the Service Area office.

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

d. The designated facility officer 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.

2–1–14. APPROACH CONTROL CEILING

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

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

2–1–15. AUTHORIZATION FOR SEPARATION SERVICES BY TOWERS

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

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

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

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

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

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

2–1–16. 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.

2–1–17. 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.

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

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

a. The FLM/CIC 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 FAAO JO 7110.65 para 9–2–1, Aircraft Carrying Dangerous Materials, subpara b2.

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

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

e. Adjacent Airport Operations

1. Aircraft that will enter the designated airspace after departing controlled airports within or adjacent to security areas 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.

2–1–19. AIRPORT TRAFFIC PATTERNS

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

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

2–1–20. OBSTACLE IDENTIFICATION SURFACES, OBSTACLE FREE ZONES, RUNWAY SAFETY AREAS, AND CLEARWAYS

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

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

c. At locations where potential for conflict exists, take action to rectify the situation by developing proposed solutions and establishing local procedures to define conditions when the approach and departure areas and other surfaces must be protected. These procedures must be included in a facility directive and the signage at the intended hold position must be consistent with the phraseology identified in FAA Order JO 7110.65, Paragraph 3-7-2, Taxi and Ground Movement.

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

REFERENCE–
P/CG Term – Approach Hold

2–1–21. FACILITY IDENTIFICATION

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

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

2–1–22. DISPOSITION OF OBSOLETE CHARTS

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

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

2–1–23. OUTDOOR LASER DEMONSTRATIONS

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

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

2–1–24. COMBINE/RECOMBINE AN ATCT/TRACON

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

2–1–25. SUBMISSION OF AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA) DATA

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

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

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

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

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

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

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

2–1–26. SUBMISSION OF SUA AND PAJA FREQUENCY INFORMATION

The Aeronautical Information Services maintain a national database of Special Use Airspace (SUA) and Parachute Jump Area (PAJA) controlling sector contact information. The database is used to publish

frequencies for pilots to obtain status information for SUAs and PAJAs. Facility managers should ensure that the following information is forwarded to Aeronautical Information Services:

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

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

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

2–1–27. REPORTING UNAUTHORIZED LASER ILLUMINATION OF AIRCRAFT

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

a. UTC date and time of event.

b. Call Sign, or aircraft registration number.

c. Type of aircraft.

d. Nearest major city.

e. Altitude.

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

g. Brief description of the event.

h. Any other pertinent information.

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

REFERENCE–
FAAO JO 7110.65, Para 2–9–3, Content
FAAO JO 7110.65, Para 10–2–14, Unauthorized Laser Illumination of Aircraft,.

2–1–28. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES

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

NOTE–
Additional information for ATC on identifying suspicious situations is located in FAAO JO 7610.4, Special Operations, paragraph 7-3-1, Suspicious Aircraft/Pilot Activity.

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

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

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

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

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

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

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

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

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

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

10. Any other situation that may indicate a suspicious aircraft, including any reported or observed unauthorized unmanned aircraft activity or

remote controlled model aircraft that deviate from normal practice areas/flight activities would be considered suspicious or a safety hazard.

REFERENCE–
Advisory Circular 91-57, Model Aircraft Operating Standards.

11. Any situation or pilot activity (e.g., 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 (e.g., airline air operations center) rather than the aircrew itself.

2–1–29. 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 (202) 493–4170.*

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

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–
FAAO JO 7110.65, Para 10–2–19, REPORTING DEATH, ILLNESS, OR OTHER PUBLIC HEALTH RISK ON BOARD AIRCRAFT

2–1–30. 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–
FAAO 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–
FAAO 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–
FAAO 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–
FAAO JO 7110.65, Para 3-8-4, Simultaneous Opposite Direction Operation

2–1–31. 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.

2–1–32. TRANSPORTATION SECURITY ADMINISTRATION AND FAA JOINT OPERATING PROCEDURES

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

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

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

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

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

e. The responsibilities outlined in sub-paragraph 2-1-32a may be delegated as necessary.

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

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

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

NOTE–
The sharing of this responsibility means that the specialist being relieved is obligated to provide a complete, accurate briefing, and the relieving specialist is obligated to ensure that a briefing takes place and is to his/her total satisfaction.

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

2–2–5. OPERATING INITIALS

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

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

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

2–2–6. SIGN IN/OUT AND ON/OFF PROCEDURES

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

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

a. FAA operations managers–in–charge (OMIC)/ front–line managers (FLM)/supervisory traffic management coordinators (STMC)/national operations managers (NOM)/national traffic management officers (NTMO)/controllers–in–charge (CIC) of the watch are responsible for ensuring the accuracy of the personnel log for time and attendance (T&A) recording. T&A information must be entered into and maintained within the ATO Resource Tool (ART) system approved.

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

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

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

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

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

(c) Sign out must be accomplished at the end of an employee's assigned shift. Sign out using the assigned shift end time may be accomplished no earlier than 15 minutes prior to the end of the shift, or no later than 15 minutes after the end of the assigned shift. Any Time Outside Shift at the end of an

assigned shift, or leave, must first receive OS/STMC/NTMO/CIC or OMIC approval prior to earning/using and recording such time in Cru X/ART.

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

(a) T&A status,

(b) Other Duties,

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

(d) Leave requests/approvals.

NOTE–
Upon signing on position the OMIC/FLM/STMC/NOM/NTMO/CIC assumes full responsibility of all check list items including those identified above.

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

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

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

2–2–7. CIRNOT HANDLING

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

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

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

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

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

2–2–8. GENOT HANDLING

A General Notice (GENOT) is issued by headquarters ATO organizations and must be transmitted to all Air Traffic Service Area offices, Flight Service Stations (FSS) and ARTCCs. Air Traffic Service Area offices and/or Flight Services Information Area Group offices must define distribution responsibility by field facilities based upon their ability to distribute GENOTs in a timely fashion, workload and areas of jurisdiction. Upon receipt, Air Traffic Facility Managers must:

a. Distribute GENOTs to other facilities as determined by their respective Air Traffic Service Area office or Flight Services Information Area Group office.

NOTE–
1. *Distribution may be via facsimile, telephone, electronic mail (e-mail), etc.*
2. *Facilities can improve the process of GENOT distribution by reporting the distribution/reception of multiple copies of the same GENOT to their respective Air Traffic Service Area office or Flight Services Information Area Group office.*

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

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

d. Ensure information required to achieve operational mission is briefed prior to an employee performing their duties.

NOTE–
Managers should update employee's Training and

Proficiency Record in accordance with FAA Order JO 3120.4, Air Traffic Technical Training.

2–2–9. PERSONNEL BRIEFINGS REGARDING AIR TRAFFIC BULLETIN ITEMS

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

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

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

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

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

(b) *R – TRACON;

(c) *F – FSS;

(d) *E – ARTCC (En Route);

(e) *EF – ARTCC and FSS; etc.

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

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

2–2–10. LAW ENFORCEMENT INFORMATION

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

2–2–11. PERSONNEL BRIEFINGS REGARDING ORDERS, PUBLISHED AERONAUTICAL DATA, AND FLIGHT PROCEDURES

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

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

REFERENCE–
FAAO JO 7210.3, Para 2-1-6, Checking Accuracy of Published Data

2–2–12. SYSTEMS MANAGEMENT OF VSCS EQUIPMENT

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

2–2–13. REPORTING EQUIPMENT TROUBLE

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

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

EXAMPLE–
"Atlanta Sector 66R side 123.4 no transmit."

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

EXAMPLE–
"Seattle Sector 46D side hot line to Salt Lake City is not working."

2–2–14. FACILITY DIRECTIVES REPOSITORY (FDR)

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

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

a. The Vice President's responsibility includes:

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

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

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

4. The Vice President for Operations Planning Services must administer system functions, provide access to the internet mirror site, and oversee the site operation and maintenance.

5. The Vice President for Safety Services oversees compliance.

b. Facility Managers must:

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

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

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

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

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

c. District Managers must:

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

2. Establish an administrative process to ensure facility compliance.

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

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

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

Section 4. Hours of Duty

2–4–1. SERVICE HOURS

ATC must be provided during published hours of operation. Early opening or late closing may be occasionally necessary to accommodate traffic which may otherwise divert or cancel its operation because air traffic control is not available at the airport. Good judgment, based on known or observed traffic, must be exercised when deciding to extend operating hours.

2–4–2. TIME STANDARDS

Use Coordinated Universal Time (UTC) in all operational activities. The word “local” or the time zone equivalent must be used to denote local when local time is given during radio and telephone communications. When written, a time zone designator is used to indicate local time, e.g., “0205M” (Mountain). The local time may be based on the 24–hour clock system. The day begins 0000 and ends 2359. The term “ZULU” may be used to denote UTC. In general, operational forms will be recorded in UTC and administrative forms recorded in local time.

2–4–3. TIME CHECKS

a. Facilities without a direct coded time source must, at 8–hour intervals, obtain an accurate time check from ARTCC/s equipped with coded time source or from any one of the following standard frequency and time radio stations:

1. WWV, Fort Collins, Colorado, on 2.5, 5, 10, 20, and 25 MHz, which broadcasts continuously except 45 to 49 minutes after each hour. The telephone number for WWV is (303) 499–7111.

2. WWVH, Kekaha, Kauai, Hawaii, on 2.5, 5, 10, 15 and 20 MHz, which broadcasts continuously except 15 to 19 minutes after each hour.

3. CHU, Ottawa, Canada, on 3.33, 7.34, and 14.670 MHz, which broadcasts continuously on all frequencies.

4. U.S. Naval Observatory, Washington, D.C., telephone number (202) 762–1401.

b. Facilities are exempt from performing time checks if they meet the following requirements:

1. The facility clocks are digital.

2. The clocks are tied to the direct coded time source on the multi–channel recorder, any one of the listed standard frequency and time radio stations or other time generating device.

REFERENCE–
FAAO JO 6670.4, Maintenance of MultiChannel Recorder Equipment, Chapter 4.

2–4–4. STATUS OF SERVICE

Part–time facilities must establish procedures for opening and closing their facilities. The procedures must be coordinated with the facility having IFR jurisdiction and must include, as a minimum, the following:

a. Broadcast an announcement upon resuming/terminating service on appropriate frequencies. This broadcast must include, as a minimum, a statement that indicates ATC service and the airspace class of service being resumed or terminated, e.g, “[Time] Waukesha Tower is terminating Class Delta services Class E/G Airspace now in effect.”

b. At locations where neither a tower nor FSS continues service or the FSS does not have lighting controls/approach aid monitoring capability, do the following as appropriate:

1. Include, in the termination broadcast, the status of the airport and essential components; e.g., Navigational Aids (NAVAIDs), airport and approach lighting, weather, NOTAMs concerning NAS, and field conditions.

2. If there is an approach procedure for the airport, inform the facility having IFR jurisdiction of the information determined appropriate in subpara b1. This information need not be forwarded when the sector controller advises no arriving traffic.

c. At the time of closure, the facility having IFR jurisdiction must inform all inbound flights with which it has communications and which will use any of the components associated with the airport of the information received from the part–time facility.

d. If a collocated FSS operates when the tower is closed, pertinent flight data must be exchanged before the tower opens/closes.

Section 3. Communications Procedures

3–3–1. SERVICE "F" COMMUNICATIONS

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

3–3–2. TELEPHONE COMMUNICATIONS

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

EXAMPLE–
ARTCC: (The facility's name) Center; for example, "Washington Center."
FSS: (The facility's name) Flight Service; for example, "Juneau Flight Service" or "(Service Provider Name) Flight Service."
ATCT: (The facility's name) Tower; for example, "Atlanta Tower."
Approach Control: (The facility's name) Approach Control; for example, "Dulles Approach Control."

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

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

d. When equipment capabilities exist, every effort should be made to conduct conversations with flight–crews or other appropriate persons regarding any aircraft accident, incident, and/or ATC services on a recorded line.

3–3–3. MONITORING FREQUENCIES

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

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

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

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

3–3–4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHz

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

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

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

1. Geographical area coverage must not be derogated.

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

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

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

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

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

1. Once a week.

2. Following equipment repairs.

3. Following Technical Operations maintenance checks.

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

3–3–5. BATTERY–POWERED TRANSCEIVERS

Facilities equipped with battery–powered transceivers must ensure that they are maintained in a state of readiness. Transceivers must be checked at least once a week.

3–3–6. FACILITY STATUS REPORT

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

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

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

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

3–3–7. TESTING EMERGENCY LOCATOR TRANSMITTERS

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

b. Airborne ELT tests must not be authorized.

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

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

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

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

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

Section 4. Recorders

3–4–1. USE OF RECORDERS

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

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

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

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

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

f. Operational voice recorders must be provided a time source.

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

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

i. Each FSS collocated with an ARTCC will use the center's voice recorder system resources to minimize requirements for spare parts, test equipment, and routine maintenance.

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

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

3–4–2. ASSIGNMENT OF RECORDER CHANNELS

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

1. ARTCCs:

(a) Radar controller.

(b) Sector controller.

(c) Radar handoff controller.

(d) Radio controller.

(e) Coordinator.

(f) Supervisor.

(g) Traffic Manager.

(h) Flight data.

(i) Data systems coordinator.

(j) Mission coordinator.

(k) AMIS controller.

2. Terminals:

(a) Arrival control.

(b) Departure control.

(c) Local control.

(d) Precision approach radar.

(e) Clearance delivery.

(f) Ground control.

(g) Inbound flight data.

(h) Outbound flight data.

(i) Direction–finding.

(j) Supervisory.

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

3. FSSs:

(a) Inflight.

(b) Preflight.

(c) Flight data.

(d) Supervisory.

4. ATCSCC:

(a) National Operations Manager (NOM).

(b) National Traffic Management Officer (NTMO).

(c) National Traffic Management Specialist (NTMS) operating position.

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

3–4–3. CHECKING AND CHANGING RECORDING EQUIPMENT

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

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

or

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

b. At terminal and flight service facilities:

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

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

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

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

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

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

e. At facilities using DALR:

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

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

3–4–4. HANDLING RECORDER TAPES, DATs, OR DALR STORAGE

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

1. The recorder number.

2. The date and the time UTC.

3. The initials of the person changing the reel.

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

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

2. Incidents: Retain the tapes, DATs, or DALRs in accordance with FAAO JO 8020.16, Aircraft Accident and Incident Notification, Investigation, and Reporting; and FAAO 1350.14, Records Management.

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

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

3–4–5. VSCS DATA RETENTION

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

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

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

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

Section 5. Navigational Aids

3–5–1. NAVAID MONITORING

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

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

a. VOR/VORTAC:

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

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

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

3. If a monitor Category 2 exists:

(a) Take appropriate action as indicated in FAAO JO 7110.65, Air Traffic Control, para 2–1–10, NAVAID Malfunctions.

(b) Notify the ARTCC.

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

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

3. *VOR and VORTAC monitor categories:*

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

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

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

b. TACAN (joint–use airports):

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

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

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

NOTE–
The military authority will issue NOTAMs for TACANs.

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

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

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

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

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

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

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

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

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

f. ILS

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

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

3. If you suspect that the indication is caused by a control line or a control station monitor failure rather than a malfunction of the component itself, take appropriate action as indicated in FAAO JO 7110.65, para 2–1–10, NAVAID Malfunctions. If a malfunction is confirmed, discontinue use of the component involved.

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

g. Compass locators:

1. Monitor continuously by automatic means.

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

3. If the provisions of subparas 1 or 2 above cannot be met, the compass locator may be considered monitored if it is equipped with an automatic monitor and shutdown feature at the site. In this case responsibility for monitoring must not be assigned to the air traffic facility.

3–5–2. SYSTEM COMPONENT MALFUNCTIONS

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

a. Try to restore the aid to normal operation.

b. If unable to restore it, discontinue its use and:

1. Notify the appropriate IFR control facility/sector.

2. Notify the appropriate FSS as necessary.

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

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

REFERENCE–
FAAO JO 7210.3, Para 3–5–1, NAVAID Monitoring.
FAAO 7930.2, Para 4–2–1, NOTAM Composition.

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

3–5–3. PROCESSING GPS ANOMALY REPORTS

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

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

3–5–4. ORIGINATING NOTAMs CONCERNING NAVAIDs

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

Section 6. Radar Use

3–6–1. COMMISSIONING RADAR FACILITIES

a. Electronic Commissioning:

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

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

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

b. Operational Implementation:

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

2. Only one phase of service should be implemented at a time. A period of 30 to 60 days should elapse between the implementation of subsequent phases. For example, ARTCCs may initiate en route service on specific routes or within specified areas; terminals may implement either arrival or departure service 30 to 60 days prior to expanding to other areas/services. Advertised services must be implemented on an all–aircraft basis and must be accomplished in accordance with FAAO JO 7110.65, Air Traffic Control. If services are initially implemented on a "part–time" basis, the daily hours (preferably 8 hours or longer) must be specified in the aeronautical information message and the advertised services maintained during those hours. The extent and types of service will be dependent upon operational requirements, personnel, and equipment capabilities. The schedule of radar service implementation must be jointly determined by the facility air traffic manager and the Service Area office. Service Area office approval is required prior to the implementation of each phase of radar service.

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

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

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

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

(c) Positioning and spacing transitioning aircraft.

c. Notification Procedures:

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

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

(b) Proposed or effective date.

(c) Specific airspace affected.

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

EXAMPLE–
BAKERSFIELD, CALIFORNIA, SURVEILLANCE RADAR EXPECTED TO BE COMMISSIONED ON OR ABOUT JUNE l5, 2004. RADAR AIR TRAFFIC CONTROL SERVICE USING RADAR SEPARATION STANDARDS WILL BE APPLIED AS APPROPRIATE. SERVICE WILL BE PROVIDED DAILY BETWEEN THE HOURS OF 1400–2300Z WITHIN 40–MILE RADIUS OF BAKERSFIELD.

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

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

4. A copy of each of the memoranda/aeronautical information message sent to System Operations Airspace and Aeronautical Information Management Office for inclusion in the Notices to Airmen publication and/or the Chart Supplement U.S. must be addressed to Manager of Publications, Manager of System Safety and Procedures, Manager of Flight Services Administration, and the appropriate Service Area offices.

3–6–2. ATC SURVEILLANCE SOURCE USE

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

1. Surveillance of aircraft to assure the effective use of airspace.

2. Vectoring aircraft to provide separation and radar navigation.

3. Vectoring aircraft to final approach.

4. Vectoring IFR aircraft to the airport of intended landing.

5. Monitoring instrument approaches.

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

7. Providing assistance to pilots of aircraft in distress.

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

1. Conducting precision or surveillance approaches.

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

NOTE–
In accordance with FAAO JO 7110.65, Chapter 3, Airport Traffic Control – Terminal, Section 6, Airport Surface Detection Procedures.

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

3–6–3. ATC RADAR BEACON SYSTEM DECODER CONTROL BOX CHECKS

NOTE–
Not Applicable to STARS.

Facility air traffic managers must ensure that radar controllers perform daily performance checks of the decoder control box as follows:

a. Each controller is responsible for determining on a day–to–day basis if the operation of his/her decoder control box is satisfactory for ATC purposes. Decoder control box performance can be determined by checking all switches, thumbwheel code selectors, and selected channels to ensure that they are functioning properly. The actual operation of each channel should be checked by decoding a known target sequentially on each channel and observing it on both double and single slash. Notify the OMIC/OSIC if a malfunction is observed.

b. OMICs/OSICs must make an entry on FAA Form 7230–4 of any malfunctions and report same to the Technical Operations personnel on duty.

c. At sites equipped with automatic beacon decoders, such as ARTS and the TPX–42, the radar beacon control decoder box need not be checked daily. The requirements of subpara a above must be met as soon as possible after reverting to broadband beacon information.

3–6–4. MONITORING OF MODE 3/A RADAR BEACON CODES

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

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

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

3–6–5. RADAR TARGET SIZING

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

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

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

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

3–6–6. TERMINAL DIGITAL RADAR SYSTEM AND DISPLAY SETTINGS

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

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

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

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

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

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

6. Permanent beacon target (Parrot) used for map alignment location.

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

1. Weather/Radar Gate normal setting.

2. Position startup weather level settings.

c. The air traffic manager and Technical Operations SMO manager must prepare a local order defining the procedures needed to protect the antenna, shutdown the antenna, transfer power between high and low voltage, and transfer from one channel to another channel.

3–6–7. PREARRANGED COORDINATION

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

negotiations should be accomplished locally and all affected personnel must be thoroughly trained in the application of the procedures.

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

1. Requirement that the following are fully operational.

(a) Terminal- ATTS

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

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

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

4. Detailed responsibilities relating to P–ACP for each position.

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

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

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

REFERENCE–
FAAO JO 7110.65, Para 5-5-4, Minima, subparagraph f.

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

REFERENCE–
FAAO JO 7110.65, Para 5–4–10, Prearranged Coordination.

3–6–8. OPERATIONAL GUIDANCE FOR FUSION

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

1. If a decision is made to discontinue use of the fusion tracker at specific sectors or facility-wide, the Air Traffic Manager, or their designee, must notify Operations - Headquarters, AJT-2, through the appropriate service area Director of Air Traffic Operations.

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

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

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

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

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

Section 9. Color Displays–Terminal

3–9–1. COLOR USE ON ATC DISPLAYS

Color use on terminal systems was developed jointly with the Terminal Safety and Operations Support Office and the Terminal Automation Human Factors Team. This section provides guidelines on the use of color on ATC displays through a national standard for terminal air traffic displays. These guidelines are intended to standardize the use of colors across the terminal systems. Any use outside these guidelines must be developed jointly with the Terminal Safety and Operations Support Office, the appropriate Service Area Director, and the Terminal Automation Human Factors Team. All use of color on ATC displays must fall within these guidelines, except for MEARTS:

a. Whenever color capabilities exist, the following National Color Standard for Terminal Systems must be installed:

1. Background must be black.

2. Point out identifier blinking or steady must be yellow.

3. Compass Rose and range rings must be dim gray. Maps A and B must be dim gray or yellow.

4. Coordination rundown list as follows:

(a) Unsent must be green.

(b) Unacknowledged must be blinking green.

(c) Acknowledged must be steady green.

5. Geographic restriction border, fill, and text must be yellow.

6. Data blocks owned must be white.

7. Limited or partial data blocks unowned must be green.

8. Search target symbol must be blue.

9. Beacon target extent must be green.

10. History trails must be blue.

11. Predicted track line must be white.

12. Minimum separation line must be white.

b. Whenever color is used to identify critical information it must be used with another method of notification such as blinking.

c. Cultural color conventions which cannot be violated include red for danger and yellow for warning.

d. The color pure blue should not be used for text, small symbols, other fine details, or as a background color.

e. Ensure all colors that are used including text and symbols are presented in sufficient contrast.

f. Ensure no more than two colors are assigned to a single data block.

g. Use of color in general should be kept to a minimum. When color is used to denote a specific meaning, e.g., yellow means caution, the number of colors used on a single display must be no more than six and should be constrained to the primary colors of red, yellow, green, blue, orange, and cyan. The optimum number of colors used for coding should be limited to four.

h. The specific colors that are selected for a display must take into account the ambient environment and the capabilities of the specific monitor.

i. Any implementation of color is to be tested in the context and environment to which it was designed.

j. Color use needs to be consistent across all of the displays that a single controller will use.

k. Facility air traffic managers must make all requests for any color changes to color baseline through the Director, Terminal Safety and Operations Support.

Section 2. User Coordination/Conferences/Publicity

4–2–1. LOCAL CONFERENCES

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

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

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

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

4–2–2. PILOT EDUCATION

Air traffic facilities should maintain an aggressive pilot education program whereby facility personnel provide briefings and conduct seminars for pilot groups. In addition to briefings on local airspace and procedures, information on national programs should be provided. Emphasis should be placed on operations within Class B and Class C airspace and on the FSS Modernization Program. The following are examples of the type of voluntary programs that may be offered:

a. Operation Rain Check.

REFERENCE–
FAAO 7230.16, Pilot Education Program – Operation Rain Check.

b. Facility sponsored pilot/controller forums.

c. FSDO accident prevention safety meetings.

4–2–3. PUBLISHED ITEMS

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

4–2–4. COORDINATION OF ATC PROCEDURES

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

b. Procedures which will have a significant effect on the users will be coordinated with them by means of correspondence, individual contacts, or a presentation at a meeting for the purpose of soliciting individual comments. When deemed appropriate, the advice and viewpoint of individual users will be obtained prior to the development of a proposed change. When safety is not a factor, a minimum of 45 days should be afforded those responding to a request for comments.

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

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

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

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

Section 6. Records

4–6–1. FACILITY RECORDS MANAGEMENT

Manage facility records in accordance with FAAO 1350.15, Records Organization, Transfer, and Destruction Standards.

4–6–2. COLLECTION OF OPERATIONAL DATA

a. Air traffic managers are responsible only for the routine collection and reporting of basic operational information as authorized in this order or by the appropriate service unit. Collection of any data must be considered a secondary function and must not interfere with the accomplishment of operational duties.

b. Air traffic managers must not permit their facilities to participate in special studies and surveys nor agree to the use of facility personnel to tabulate, prepare, or forward to outside organizations or parties any special summaries, abstracts, reports, or aeronautical data unless approved in advance by the Service Area office.

4–6–3. FORMS PREPARATION

a. Exercise care when preparing forms to ensure neatness and accuracy. The forms are a part of the facility's permanent records and subject to review by authorized personnel or agencies.

b. Except as in subpara c, do not erase, strikeover, or make superfluous marks or notations. When it is necessary to correct an entry, type or draw a single horizontal line through the incorrect data, initial that part of the entry, and then enter the correct data.

c. When using an automated Form 7230–4, grammatical and spelling errors may be corrected by use of delete or type–over functions. Substantive changes in contents of remarks should be accomplished by a subsequent or delayed entry. If the computer software used contains a strikeout feature, this feature may be used.

d. Authorized FAA abbreviations and phrase contractions should be used.

e. New daily forms must be put into use at the start of each day's business.

4–6–4. FAA FORM 7230–4, DAILY RECORD OF FACILITY OPERATION

a. Completion of FAA Form 7230–4, Daily Record of Operation. Using agency–approved automation methods to complete FAA Form 7230–4 is preferred to using manual methods.

1. Each air traffic facility, where FAA telecommunications network capability exists (excluding FAA flight service stations), must use the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230–4.

2. Where currently in use, facilities and/or TMUs may continue to use the NTML to complete an automated version of the FAA Form 7230–4.

NOTE–
A National Workgroup has been established to develop methods to exchange pertinent data between CEDAR and NTML that is needed to complete FAA Form 7230–4. This method will enable a single method of completing an automated version of the FAA Form 7230–4 while maintaining the unique program functionality capability of both CEDAR/NTML programs.

3. If an automated method is not available to complete FAA form 7230–4, the facility and or traffic management unit must manually complete the form. An example of the Daily Record of Facility Operation follows this section. (See FIG 4–6–1.)

b. The use of FAA Form 7230–4 for individual position assignments is authorized only for the STMCIC, FLMIC, OMIC, TMC, TMCIC, and CIC positions, and positions at the ATCSCC.

4–6–5. PREPARATION OF FAA FORM 7230–4

Personnel responsible for preparation of the Daily Record of Facility Operation, FAA Form 7230–4, must ensure that entries are concise, yet adequately describe the operation of the facility, including any abnormal occurrences. Prepare FAA Form 7230–4 as follows:

a. Use of a typewriter, computer printout, or ink is mandatory. Signatures or handwritten initials must

be in either blue or black ink. Handwritten entries must be printed, rather than in script. REMARKS section entries must be single–spaced.

b. Make all time entries in UTC, except that in the section titled "Personnel Log," local time must be used for time and attendance purposes.

c. Complete the information required at the top of each form.

d. Make an appropriate notation under "Operating Position" to indicate the extent of the operation described on each form; e.g., "AM," "All," "Sector D3," etc.

e. The first entry in the REMARKS section of each day's form must indicate the employee responsible for the watch and must be used to show carry–over items. Items to be carried over from the preceding "Daily Record of Facility Operation" are those which will affect the current day's Daily Record (e.g., equipment outages, runway or airspace status, or coordinated routes/procedures). The last entry on each day's form must indicate the close of business (COB), consider midnight local time or facility closing time, if earlier, as the close of the day's business.

f. Employees must sign on/off as follows:

1. When a typed or handwritten FAA Form 7230–4 is used, the employee assuming responsibility for the watch must sign on using their operating initials and must sign the certification statement at the bottom of the form.

2. When an automated FAA Form 7230–4 is used, in lieu of actually signing the form, the employee assuming responsibility for the watch must sign on using their name, e.g., "1430 J. SMITH ON." Entering the name of the employee assuming responsibility for the watch, in lieu of entering operating initials, serves the same purpose as signing the certification statement at the bottom of the actual form. Additionally, the employee responsible for the watch at the time that the form is printed out must sign the certification statement at the bottom of the form, as when the actual FAA Form 7230–4 is used.

3. When FAA Form 7230–4 is used to indicate position responsibility, record employees initials and exact minute on/off the position.

g. Establish and post a list of equipment checks required during each watch; e.g., recorder checks, siren check, etc. Make an entry ("WCLC") on FAA Form 7230–4 when the watch checklist has been completed. Notify the organization responsible for corrective action on equipment malfunctions. Record equipment malfunctions, equipment released for service, notification information and/or course of action taken to correct problem, and return of equipment to service. Facilities may establish local forms and procedures for recording and disseminating equipment malfunction and restoration information. Local forms used for recording this information are considered to be supplements to FAA Form 7230–4 and must be filed with it.

NOTE–
At facilities which are closed prior to the beginning of the new business day, changes in status can occur during nonoperational hours. If the status of equipment or other facility operations has changed from status reported on previous days' FAA Form 7230–4, changes must be noted in Watch Checklist entry, as well as time of status change, if known (e.g., WCLC – ABC VOR RTS 0700). If necessary, place an "E" in the left margin as prescribed in para 4–6–5, Preparation of FAA Form 7230–4.

h. FAA Order 7210.632, Air Traffic Organization Occurrence Reporting, defines situations requiring a Mandatory Occurrence Report (MOR). Record MORs with the minimum detail necessary in order to identify the initiating incident (for example, unusual go–around, 3–hour tarmac delay) and how it was identified (for example, in–flight evaluation).

1. En Route and Oceanic facilities must use the CEDAR tool to record and disseminate MOR's. En Route and Oceanic facilities must also use CEDAR to document the resolutions of MOR's.

2. Terminal facilities and flight service stations may utilize an automated version of FAA Form 7230–4 or establish local forms and procedures for recording, disseminating, and documenting the resolution of MOR's. Local forms used for recording this information are considered supplements to FAA Form 7230'4 and must be filed with it.

i. Place a large letter "E" in the left hand margin beside entries on equipment malfunctions. The "E" must also be used when equipment is restored to service. The "E" is not required for facilities using local forms if procedures are established in accordance with subpara g.

NOTE–
The "E" is to be used on entries related to equipment problems which require Technical Operations involve-

ment. The "E" is not required for routine maintenance items or for carryover entries on previously entered equipment malfunctions.

j. When this form is used to describe the operation of radioteletypewriter and radiotelegraph circuits, record the following information:

1. Frequencies being used and type of watch (continuous or scheduled) being maintained on each frequency.

2. A record of each communication, test transmission, or attempted communication except when such information is recorded elsewhere in the facility, the time the communication is completed, the station communicated with, and the frequency used.

k. Employees other than the person responsible for the watch who make an entry must initial or enter initials for each of their own entries.

l. Use additional forms as necessary to complete the reporting of the day's activity.

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

n. The air traffic manager, or his/her designee, must initial the form after reviewing the entries to ensure that the facility operation is adequately and accurately described.

4–6–6. FAA FORM 7230–10, POSITION LOG

a. Air traffic managers must ensure that FAA Form 7230–10, Position Log, or an automated sign on/off procedure is used for position sign on/off. FAA Form 7230–10 must be prepared daily. All logs, including automated ones, must reflect 24 hours or the facility's official operating hours, if less than 24 hours daily.

b. Position logs must be used as the sole–source record for on the job training instructor (OJTI) and evaluator time and premium pay. As a supporting document for time and attendance (T&A) purposes, position logs which document on the job training (OJT) time must be retained for one year prior to destruction.

c. Prepare FAA Form 7230–10 as follows:

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

2. Field 2 must contain a position identifier that is a maximum of five letters and/or numbers, starting in the first space on the left side of the field. Unused spaces must be left blank.

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

(b) *TERMINALS and FSSs:* When there is more than one position of a particular type, establish and use individual identifiers for each position. When only one position of a particular type exists, this field may be left blank.

3. Field 3 must contain a maximum of two letters to show the position type, as follows:

(a) *ARTCCs:* Starting on the left side of the field, use position codes as follows:

TBL 4–6–1
Field 3 – ARTCC

Designator	*Position*
A	Assistant Controller
D	Non–Radar Control
F	Flight Data
H or RA	Handoff, Tracker or Radar Associate
R	Radar Control
TM	Traffic Management
O	Other Positions

(b) *Terminals:* Use two−letter position codes as follows:

TBL 4−6−2
Field 3 – Terminal

Designator	*Position*
Tower	
AC	Approach Control Cab
CC	Coordinator Cab
CD	Clearance Delivery
FD	Flight Data
GA	Ground Control Assistant
GC	Ground Control
GH	Gate Hold
LA	Local Control Assistant
LC	Local Control
SC	Supervision Cab
TRACON	
AP	Approach Control TRACON
AR	Arrival Radar
CI	Coordinator TRACON
DI	Data TRACON
DR	Departure Radar
FM	Final Monitor Radar
FR	Final Radar
HO	Handoff TRACON
NR	Non−Radar Approach Control
PR	Precision Approach Radar
SI	Supervision TRACON
SR	Satellite Radar
Tower/TRACON	
TM	Traffic Management

(c) *FSSs:* Use two−letter codes, as follows:

TBL 4−6−3
Field 3 – FSS

Designator	*Position*
BC	Broadcast
FD	Flight Data
IF	Inflight
NO	NOTAM
OT	Other
PF	Preflight
WO	Weather Observer

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

5. Field 5 must contain the UTC time that the employee assumes responsibility for the position or the UTC time that the position is combined with another. For employees receiving OJT instruction or evaluation, field 5 must contain the UTC time that the OJT instruction or evaluation begins.

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

7. Field 7 must contain the UTC time that the employee is relieved of responsibility for the position or the UTC time that the position is decombined. For employees receiving OJT instruction or evaluation, field 7 must contain the UTC time that the OJT instruction or evaluation ends.

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

9. Field 9 must contain the identifier of the position being combined with (per field 2). Field 9 may be left blank if the same entry is appropriate and entered in field 10.

10. Field 10 must contain the type of position being combined with (per field 3).

11. If the second page (back−side) of FAA Form 7230−10 is used, then fields 1, 2, 3 and 4 on that page must also be completed.

12. When a mistake is made in filling out fields 5, 6, 7, 8, 9, or 10 − if the portion of the line that is incorrect can be legibly corrected, then line out that portion only and write the correct information. If the incorrect portion cannot be legibly corrected, then line out the entire line and write the correct information on the next line.

4–6–7. AUTOMATED POSITION SIGN ON/OFF

a. *FLIGHT SERVICE STATION*.

Use of automated position sign on/off procedures is approved for FSS facilities. Facility managers are responsible for ensuring the accuracy of sign on/off data. Facilities must ensure sign on/off data is forwarded to concerned facilities along with other data required for accident packages. Sign on/off data must be retained for six months, in accordance with FAA Order 1350.15, Records Organization, Transfer, and Destruction Standards. Data can be retained either electronically or on paper. FAA Form 7230–10, Position Log, is only required to be used during those times that the automated procedure is not available.

b. *TERMINAL/EN ROUTE*.

Use of automated position sign on/off procedures is approved for terminal and en route facilities. The information requirements described in para 4–6–6, FAA Form 7230–10, Position Log, for FAA Form 7230–10 also apply to the automated procedure, except that times on/off the position may be displayed to the second rather than to the minute. Before implementation, facilities must receive En Route and Oceanic Operations Area or Terminal Operations Area office approval and must verify the accuracy of the automated sign on/off procedure by conducting a 30–day trial period. After successfully verifying the automated procedure's accuracy, an actual FAA Form 7230–10 is only required to be used during those times that the automated procedure is not available.

4–6–8. TIME AND ATTENDANCE (T&A) RECORDING

Record the actual times an employee works and is absent on a daily basis. Facilities may use any of the following methods for documenting time and attendance reported to the servicing payroll office.

a. The supervisor's or timekeeper's observation and subsequent recording of employees' hours worked. When this method is used, leave usage must be documented via OPM (Formerly Standard Form 71), Request for Leave or Approved Absence, or a locally produced form/electronic format documented by facility directive.

b. Personnel log. A locally produced sign in/out form documented by facility directive, or FAA Form 7230–4.

1. When employees arrive, they must sign their name and record their time of arrival. When employees leave, they must record their time of departure and initial the form.

2. The personnel log must contain a statement or certification signed by each shift supervisor affirming the form's accuracy and approving the entries made by personnel while under their supervision. This statement must include the specific period of time for which each supervisor is providing certification.

3. The personnel log may also be used to document leave usage provided:

(a) The employee records the amount and type of leave used on the day the leave is used.

(b) Since leave use is covered by the Privacy Act, local management must inform all employees that they may use OPM (Formerly Standard Form 71), Request for Leave or Approved Absence instead of indicating their leave use on the log (or any other group format employed). This notification must be in writing, signed by the employee and retained in facility files, or the notification may be included in a facility directive which authorizes the group form.

c. Facilities may develop forms other than the personnel log to facilitate the documentation of leave and absence, provided:

1. The form includes, as a minimum, the employee request for leave, and the supervisor's approval/disapproval.

2. Each form and its use must be contained in a facility directive.

3. Group forms must allow for the Privacy Act alternative addressed above.

d. Initialing time and attendance reports may be used to document leave usage where this capability still exists.

e. Time clocks or other automated timekeeping devices. These devices may be linked to a supporting computer system for purposes of recording.

FIG 4−6−1

Daily Record of Facility Operation
[FAA Form 7230−4]

DAILY RECORD OF FACILITY OPERATION

PAGE NO	DATE	CHECKED BY	CHIEF
ONE	MAY 27, 1993		

LOCATION	IDENTIFICATION	TYPE FACILITY	OPERATING POSITION
EDEN, VA	EDN	ATCT	AREA SUPERVISOR

	TIME (GMT)	REMARKS
	0400	OR ON. NORTH OPERATION. CARRYOVER FROM PREVIOUS LOG: RWY 15L/33R VASI OTS, 119.7 PRIMARY TRANSMITTER OTS, RCO AT EDN OTS, WEST ARRIVALS ROUTED VIA JOCIE.
	0410	WCLC.
E	0435	ARTS SCATTERED BY AFS. CDR REMAINS OFF PER AFS REQUEST/RV.
	0653	TWY D LIGHTS OTS. ARPT OPS NOTIFIED.
E	0905	RWY 19R GS MONITOR TO AFS/RV.
	1020	TWY D LIGHTS RTS BY ARPT OPS.
	1135	AN ON. ABV NOTED.
E	1155	WCLC. APLHANUMERICS ON ~~V4~~ GA V7 OTS. AFS NOTIFIED.
E	1220	RWY 19R GS MONITOR TO ATS.
	1445	RWY 1R ALS OTS FOR MAINT, AS PER ARPT OPS.
	1630	ARTCC DEP RESTRICTION: 10 MIT OVR SWANN.
E	1705	119.7 PRIMARY TRANSMITTER RTS, AS PER AFS.
E	1710	RADAR CHANNEL A WEAK, CHANNEL B NORMAL. AFS NOTIFIED/EF.
	1925	RWY 1R ALS RTS, AS PER ARPT OPS.
	1940	PG ON. ABV NOTED.
	1955	WCLC. SWANN DEP RESTRICTION CANCELLED BY ARTCC.
	2030	DELAYED ENTRY: 1945 UTC, JF DEPARTED FOR LAX ON SF-160 VIA AAL278.
	2105	FLIGHT ASSIST: N277Y, LR25, SEE FAA FORM 7230-6.
	2210	DH ON. ABV NOTED.
E	2225	RADAR CHANNEL A NORMAL, AS PER AFS/EF.
E	2245	ATIS OTS. AFS NOTIFIED.
E	2335	ATIS RTS.
E	0210	FSP 2 MALFUNCTION, AFS NOTIFIED.
	0350	PO ON. ABV NOTED.
	0359	COB.

I CERTIFY that entries above are correct, that all scheduled operations have been accomplished except as noted, and that all abnormal occurrences and conditions have been recorded

SIGNATURE(S) OF WATCH SUPERVISOR(S)

FAA Form 7230-4 (4-82) Supersedes previous edition
(1−94)

NSN: 0052−00−024−5002

FIG 4–6–2
Position Log
[FAA Form 7230–10]

POSITION LOG

(1) FACILITY ID	(2) POSITION IDENTIFER	(3) Pos Type	(4) DATE

(5) TIME ON	(6) INITIALS	(7) TIME OFF	(8) Code	Where Combined	
				(9) POSITION IDENTIFIER	(10) Position Type

CODE:
C = ATCS/ATA
S = Supervisor/Staff Spec.
T = Trainee/Developmental
M = Trainee/Developmental Monitoring
R = Trainee/Developmental Certification/ Evaluation

FAA Form 7230-10 (6-94) NSN: 0052-00-024-6102 Page 1

Section 2. FAA Aircraft

5–2–1. IDENTIFYING DEPARTMENT OF TRANSPORTATION (DOT) AND FAA FLIGHTS

The following alphanumeric identifiers and radio/interphone call–signs are established for use in air/ground communications when the Secretary of Transportation, Deputy Secretary of Transportation, FAA Administrator, or FAA Deputy Administrator have a requirement to identify themselves:

a. DOT.

1. Secretary:

(a) Identifier: DOT–1

(b) Call–Sign: Transport–1

2. Deputy Secretary:

(a) Identifier: DOT–2

(b) Call–Sign: Transport–2

b. FAA.

1. Administrator:

(a) Identifier: FAA–1

(b) Call–Sign: Safeair–1

2. Deputy Administrator:

(a) Identifier: FAA–2

(b) Call–Sign: Safeair–2

5–2–2. FLIGHT INSPECTION AIRCRAFT

a. FAA aircraft engaged in flight inspection of navigation aids must be provided special handling by ATC facilities to the maximum extent possible. FICOs/flight inspectors are expected to coordinate with the facility's air traffic supervisor on duty, or a designated representative, prior to conducting flight inspections. Occasionally, due to unplanned/special flight inspection requirements, flight inspectors may attempt to conserve flight hours and accomplish additional opportune flight checks with minimal advance coordination.

b. Unless otherwise agreed to, direct contact must be maintained between the flight inspection pilot and the ATC facility to provide for an exchange of information regarding the intention of the pilot and the known traffic in the facility's area of responsibility.

c. Many terminal and en route flight inspections are accomplished using automatic recording equipment, and an uninterrupted flight is necessary for the successful accomplishment of the flight. Maximum cooperation will help the FICOs accomplish their job within their limited aircraft resources. FAAO 8240.41, Flight Inspection/Air Traffic On–site Coordination Requirements, provides additional details as does FAA0 7110.65, Air Traffic Control.

d. Facility procedures must provide a means of passing impending flight inspection information on to subsequent shifts and/or immediately notifying FICOs/PICs when facility air traffic activities make it impossible to handle flight inspections expeditiously.

5–2–3. HIGH ALTITUDE INSPECTIONS

a. High altitude flight inspection operations are generally conducted on IFR flight plans; "VFR–on–top" will not be requested except when weather conditions are ideal and excessive delays would result from operating at an assigned flight level.

b. The pilot must contact the STMCIC of the appropriate facility for coordination prior to flight when special handling is required for the successful completion of the flight check.

NOTE–
Flight inspection operations requiring the participation of ground personnel or the establishment of specific communications or radar operation capabilities are considered to require special handling. Such flights must be coordinated with the appropriate facilities before departure.

5–2–4. RESEARCH AND DEVELOPMENT FLIGHTS

a. Aircraft participating in FAA research and development test activities are sometimes required to deviate from standard procedures to accomplish the mission. These aircraft should be provided maximum assistance by control facilities subject to other traffic. Direct radio contact should be maintained between the aircraft and the control facility to provide for an exchange of information regarding the pilot's intention and known traffic.

b. Upon request by the pilot, the air traffic manager of the controlling facility may authorize the use of special flight procedures to be used by aircraft participating in FAA research and development activities. Control personnel must be thoroughly briefed on the procedure prior to the flight.

NOTE–
The actions established herein do not affect the pilot's responsibility to obtain any necessary waivers to the CFRs.

(e) Any special requests.

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

2. The ATCSCC must:

(a) Upon receipt of hurricane reconnaissance mission data, conference the affected ARTCC TMUs and distribute the mission information.

(b) Assist field facilities with traffic flow priorities if the hurricane reconnaissance flight will impact terminal traffic.

3. ARTCC TMUs must:

(a) Upon receipt of hurricane reconnaissance mission data, ensure that they are distributed to appropriate facilities in their jurisdiction.

(b) Relay any operational concerns to the ATCSCC for further evaluation and coordination.

4. Should it become necessary to contact a TEAL or NOAA flight and all other methods of communication are not possible (e.g., direct radio, ARINC, aircraft relay), the Chief, Aerial Reconnaissance Coordinator, All Hurricanes (CARCAH) may be requested to relay messages to/from the aircraft. You may receive a phone call from CARCAH to authenticate the request.

5. Requests to change any portion of the NHOP must be coordinated with System Operations and Safety.

5–3–7. OPEN SKIES TREATY AIRCRAFT PRIORITY FLIGHTS (F and D)

a. The ATCSCC CARF must be the FAA coordination unit between the Defense Threat Reduction Agency (DTRA) and field facilities for all OPEN SKIES operational information. This includes initial notification and follow-up information on each mission that requires priority handling.

NOTE–
OPEN SKIES flights that require priority handling are located in FAA Order JO 7110.65, Para 9-2-22.

b. ARTCCs/CERAPs/HCF must designate and advise the CARF of a focal point within that facility for OPEN SKIES information.

c. Advance scheduled movement information of OPEN SKIES aircraft received from the DTRA will be forwarded by the CARF.

d. Upon initial notification of a priority OPEN SKIES flight, the affected ARTCCs/CERAPs/HCF must inform all SUA-using/scheduling agencies along the route of flight and any other facility/agency it deems necessary within their area of responsibility of the flight path and possible deviation path of the aircraft. A letter of agreement is required between the using agency and the controlling agency for Open Skies (F and D) aircraft to transit active SUA. When Open Skies (F and D) aircraft transit SUA, an ATC facility must provide approved separation services at all times.

NOTE–
OPEN SKIES flights will not deviate from approved route of flight without ATC clearance.

REFERENCE–
FAAO JO 7110.65, Para 9-2-22.c.1(a)(1), Open Skies Treaty Aircraft.

e. The air traffic manager of each facility through which the priority OPEN SKIES aircraft transits must ensure that a supervisory specialist(s)/CIC monitors the aircraft while in the facility's airspace. The supervisory specialist(s)/CIC must monitor the movement of the priority OPEN SKIES aircraft from the flight's entry into the facility's airspace until the flight exits the facility's airspace to ensure that priority handling, separation, control, and coordination are accomplished.

REFERENCE–
FAAO JO 7110.65, Subpara 2–1–4n, Operational Priority.
FAAO JO 7110.65, Para 9–2–22, Open Skies Treaty Aircraft.
TREATY ON OPEN SKIES, TREATY DOC. 102–37.

f. Air traffic facilities must notify the CARF (540-422-4212/4213) and DTRA Operations (703-767-2003) immediately in the event of any incidents or problems generated by OPEN SKIES aircraft.

g. The CARF must immediately notify System Operations Security/Strategic Operations Security for resolution of problems or incidents, if necessary.

5–3–8. FOREIGN STATE DIPLOMATIC FLIGHTS

Diplomatic clearances that authorize foreign state aircraft (military or non–military) to operate in U.S. territorial airspace for a specific time and purpose are approved by the U.S. State Department. Except for Open Skies Treaty priority flights, foreign state

diplomatic flights are non–priority. Contact the FAA System Operations Support Center (SOSC) (202–267–8276 or email 9–ATOR–HQ–RT–REQ@faa.gov) with questions or issues concerning foreign state diplomatic flights.

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 Radar, Non–Radar, or Oceanic and subclassified by altitude strata.

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

	Designator	*Position*
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., Ocean21);

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 TBFM delay information for single–center metering (SCM) or adjacent–center metering (ACM) to display TBFM schedule information on the main display monitor (MDM).

Section 4. Services

6–4–1. ADVANCE APPROACH INFORMATION

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

6–4–2. MINIMUM IFR ALTITUDES (MIA)

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

NOTE–

1. *This may be accomplished by appending the data on sector charts or MVA charts. Special translucent sectional charts are also available. Special ordering information is contained in FAAO 1720.23, Distribution of Aeronautical Charts and Related Flight Information Publications.*

2. *For guidance in the preparation and review of Mini–mum IFR Altitude charts see FAAO 7210.37, En Route Minimum IFR Altitude (MIA) Sector Charts.*

REFERENCE–

FAAO JO 7210.3, Para 3–8–2, Radar Mapping Standards.

6–4–3. SPECIAL USE FREQUENCIES

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

6–4–4. PRACTICE INSTRUMENT APPROACHES

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

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

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

Section 6. Air Carrier Computer Interface Program

6–6–1. GENERAL

Apply the provisions of this section when coordinating and implementing the air carrier computer interface program. The term *air carrier* used in this section includes scheduled air taxi operators that have the capability to transmit flight plans via the NADIN/Center B interface to ARTCC computer programs.

6–6–2. FACILITY RESPONSIBILITIES

The ARTCC, upon request from an air carrier to participate in this program, must:

a. Obtain local contacts from the air carrier for coordinating the program.

b. Provide the air carrier with a contact for the continued coordination of the program.

c. Ensure that the air carrier is apprised of the criteria in para 6–6–3, Criteria for Participation.

d. Develop facility procedures to monitor air carrier flight plan input as specified in Chapter 6, Section 5, Stored Flight Plan Program.

6–6–3. CRITERIA FOR PARTICIPATION

Air carriers participating in the program must be advised of the following criteria:

a. Departure points and destinations must be contained within the CONUS. However, some users have made previous arrangements with various ICAO States (Puerto Rico, Panama, Canada, etc.) to accept domestic format. These agreements must be honored.

b. Flight plans must not be filed more than 3 hours in advance of the proposed departure times. Flight plans must be telephoned to the appropriate facility if less than 45 minutes from the proposed departure time. All changes in the flight plan after filing must be telephoned to the appropriate facility.

c. All flight plans must adhere to the format convention and content specified in para 6–6–4, Format Conventions, and para 6–6–5, Message Content.

6–6–4. FORMAT CONVENTIONS

Flight plans must be filed in the following format:

a. Data input must adhere to a fixed order and not exceed the stated maximum number of characters or elements allowed for each field in messages addressed to an ARTCC computer.

b. Each field of data is composed of one or more elements. Discrete elements of information within a field are separated by delimiters; generally, virgules (/) or periods.

c. Some fields contain the necessary functions to operate the computer adapters and are designated by alpha characters. Do not separate these fields with spaces.

d. One space character must be entered at the end of each data field, except:

1. The first data field of a message must not be preceded by a space.

2. The last data field of message need not be followed by a space.

3. The Remarks (Field 11) terminate with the last nonspace character transmitted.

6–6–5. MESSAGE CONTENT

The complete message content, the order of data, the number of characters allowed within any data field or element, and any associated operational procedure or restrictions must be as follows: (See FIG 6–6–1).

a. Start of Message Code (Field A). Appropriate individual company coding to ensure entry into the AFTN system.

b. Preamble Line (Field B). Consists of priority and addressees in ICAO format.

c. End of Line Function (Field C). Three characters composed of carriage return, carriage return, line feed.

d. Computer Adapter Turn–on Code (Field D). Three characters specifying the facility adapter code plus carriage return, carriage return, line feed.

e. Source Identification (Field 00). Ten characters followed by a space character in the following order:

1. Three–character address of the originating office.

2. Four−character (digits) time in UTC.

3. Three characters (digits) representing the number of the message being transmitted to the specific facility. All facilities will have individual sequence numbers beginning with number 000 at 0000Z.

f. Message Type (Field 01). The letters "FP" followed by a space character.

g. Aircraft Identification (Field 02). Consists of two to seven characters followed by a space character. The first character of the identification must be a letter.

h. Aircraft Data (Field 03). Consists of two to nine characters followed by a space character. Aircraft data within the field may vary from one to three elements consisting of:

1. Super or heavy aircraft indicator (H/): When aircraft are designated super or heavy, the heavy indicator is mandatory.

2. Type of Aircraft: This element is mandatory and contains the standard aircraft type designator, in accordance with FAA Order JO 7360.1, Aircraft Type Designators.

3. Equipment Suffix: This element is optional and consists of a slash followed by one letter which is one of the approved designators identifying transponder and/or navigation equipment.

i. Airspeed (Field 05): Consists of two to four characters followed by a space character. This field must include the filed true airspeed in knots or Mach speed.

j. Departure Point (Field 06): The airport of departure must be two to a maximum of five characters using the authorized identifier as listed in FAAO JO 7350.8, Location Identifiers, and must duplicate the first element of the route of flight (Field 10).

k. Proposed Departure Time (Field 07): Consists of five characters followed by a space character. This field contains the letter "P" followed by a four−digit time group (in UTC).

l. Requested Altitude (Field 09): Consists of two to three characters followed by a space character. Altitudes or flight levels, as appropriate, must be expressed in hundreds of feet.

m. Route of Flight (Field 10): The route of flight consists of the departure point, the route of flight, and a destination:

1. Field 10 is fixed sequence field and must begin with a fix; e.g., fix.route.fix.route., etc. An element is separated from another element by a period character.

2. When consecutive fix elements or route elements are filed, the fixed sequence format is maintained by inserting two period characters between the filed Field 10 elements; e.g., fix..fix or route..route.

3. The maximum number of filed field elements for computer−addressed flight plans is 40. Double period insertions do not count against the 40−element limitation.

(a) Fix Descriptions: A fix identifies a geographic point and must be one of either domestic, Canadian, or international identifiers, which are two to twelve alphanumeric characters.

(b) Route Descriptions: A route element must be one of the following:

(1) Airway: The official airway designator must be filed.

(2) Standard Instrument Departures (SID): SIDs, if used, must be filed by the computer−code designator as the second element of Field 10 and followed by the transition fix.

(3) Standard Terminal Arrivals (STAR): STARs, if used, must be filed by the computer−code designator as the next to last element of Field 10 and be immediately preceded by the entry or transition fix.

(4) Published Radials: Published radials; e.g., within a preferred route, are considered airways. Do not file unpublished radials.

EXAMPLE−
".RBV020"
".JFK053"
"DPK017"

(5) North American Routes (NAR): Numerically coded routes preplanned over existing airways and route system to and from specific coastal fixes serving the North Atlantic.

EXAMPLE−
".NA50"
".NA9"

Section 3. Displays

8–3–1. DIGITAL MAP VERIFICATION

Verification of the accuracy of new or modified digital maps must be accomplished through the use of "targets of opportunity" over displayed fixes, navigational aids, etc. Any observed discrepancies must be documented to indicate the observed direction and displacement. If any errors cannot be corrected or if a facility is otherwise dissatisfied with the results from "targets of opportunity," a request may be made through the FICO for a flight inspection. If no discrepancies are noted, no documentation is required.

8–3–2. DATA DISPLAY FOR BLOCK ALTITUDE FLIGHTS

Facilities operating in the narrowband mode must ensure that, as a minimum, radar target symbols, aircraft identifications (ACIDs), and altitude information are displayed at all sectors affected by altitude assignments involving more than one altitude (Block Altitude) when radar separation is being provided.

8–3–3. SELECTED ALTITUDE LIMITS

The display of Mode C targets and limited data blocks is necessary for application of Merging Target Procedures. Sectors must ensure the display of Mode C targets and data blocks by entering appropriate altitude limits and display filters to include, as a minimum, the altitude stratum of the sector plus:

a. 1,200 feet above the highest and below the lowest altitude or flight level of the sector where 1,000 feet vertical separation is applicable; and

b. 2,200 feet above the highest and below the lowest flight level of the sector where 2,000 feet vertical separation is applicable.

NOTE–
1. *The data block, for purposes of this paragraph, must contain the beacon code and mode C altitude at a minimum.*

2. *Exception to these requirements may be authorized for specific altitudes in certain ARTCC sectors if defined in appropriate facility directives and approved by the respective service area operations directorate.*

8–3–4. AUTOMATED WEATHER DISPLAY STATUS

Facilities operating in the narrowband mode must ensure that sector controllers are immediately briefed on any change in the status of the Weather Fixed Map Unit (WFMU) or radar polarization.

Part 3. TERMINAL AIR TRAFFIC CONTROL FACILITIES

Chapter 10. Terminal Operations, Services, and Equipment

Section 1. General

10–1–1. OPERATING POSITION DESIGNATORS

a. The following designators may be used to identify operating positions in a terminal. (See TBL 10–1–1.)

TBL 10–1–1
Operating Position Designators

	Designator	*Position*
1.	AD	Arrival Data (Radar)
2.	AP	Approach Control
3.	AR	Arrival Control (Radar)
4.	CC	Coordinator (Tower)
5.	CD	Clearance Delivery
6.	CI	Coordinator (Radar)
7.	DC	Departure Control
8.	DD	Departure Data (Radar)
9.	DR	Departure Control (Radar)
10.	EN	Flight Service
11.	FD	Flight Data
12.	GC	Ground Control
13.	LC	Local Control
14.	OM	Operations Manager
15.	OS	Operations Supervisor
16.	PAR	Precision Approach Radar
17.	STMCIC	Supervisory Traffic Management Coordinator–in–Charge

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

10–1–2. TOWER/RADAR TEAM CONCEPTS

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 tower cab/facility/sector. The team, as a whole, has responsibility for the safe and efficient operation of the tower cab/facility/sector.

10–1–3. MILITARY ATC BOARDS

a. Commanders at USAF bases with flight operations have been directed by USAF to establish airfield operations boards. Among other things, the boards develop recommendations for improving ATC and airfield services and attempt to resolve local air traffic problems.

b. The ATCT manager, his/her representative, or the ATREP at these bases may be designated as a member of the board. The FAA member must inform the board that his/her participation does not commit the FAA to abide by the board's recommendations even though they may be approved or even suggested by him/her.

c. The FAA member should become familiar with Air Force Regulation 55–48, Air Force Instructions 13–203, Air Traffic Control, and 13–213, Airfield Management.

10–1–4. SECTIONAL AERONAUTICAL AND TERMINAL AREA CHARTS

a. Terminal Area Charts (TACs) provide detailed information needed for flight within or in the vicinity of Class B airspace. Visual checkpoints are depicted on TACs, and at some locations, on Sectional Charts.

b. VFR Flyway Planning Charts are published on the back of existing TACs. Facilities with a TAC desiring publication of a VFR Flyway Planning Chart should submit requests through the Terminal Operations Service Area office to Terminal Safety and Operations Support. Additional charts may be considered after all Class B airspace locations have been completed. VFR Flyway Planning Charts,

which are intended to facilitate VFR transition through high density areas, depict generalized VFR routing clear of major controlled traffic flows which may be used as alternatives to flight within Class B airspace. Pictorial ground references and VFR checkpoints are provided to aid visual navigation. These charts are designed for information and planning purposes and are not intended to discourage VFR operations within Class B airspace. Pilot compliance with recommended flyways and associated altitudes is strictly voluntary. Controllers must not assign a charted VFR flyway to a pilot as part of a clearance nor predicate separation of aircraft on any expected pilot compliance with the depicted altitudes.

c. Facility air traffic managers must review VFR checkpoints published on Sectionals, TACs, and VFR Flyway Planning Charts for accuracy, completeness, and reasonableness. Nearby ATCT that make use of the same area depicted on the charts must agree upon the checkpoints to be depicted.

d. Submit changes or revisions to VFR checkpoints to System Operations Airspace and Aeronautical Information Management at least 10 weeks prior to the scheduled publication date.

e. If required, a list of checkpoints may be developed in association with local flight schools and fixed base operators for local use. They may only be used with local users who participated in developing the list. They may not be charted or published.

10–1–5. AREAS OF NONVISIBILITY

Air traffic managers of towers located where portions of the airport surface are normally designated movement areas and/or where portions of the airport traffic pattern are not visible from the tower must, after coordination with the airport management, issue a letter to airmen describing the condition. The recommended wording is:

a. "Due to obstructed vision, (facility identification) tower is unable to provide airport traffic control service in following areas: (describe the areas)."

b. "Due to the movement of uncontrolled ground traffic, (facility identification) tower is unable to provide airport traffic control service in the following areas: (describe the areas)."

c. "Use caution, the following areas are not visible from the (facility name) tower: (describe the areas, traffic pattern, active runway)."

10–1–6. SELECTING ACTIVE RUNWAYS

a. ATCT supervisor/CIC has primary responsibility for determining which runways are to be designated as "active" runways. Where optional configurations of multiple active runways are used for operational flexibility, responsibility for designating which of the optional runways are active at any time may be further delegated. A facility directive must be issued to define specific coordination requirements. (See FAAO JO 7110.65, Air Traffic Control, para 3–1–3 thru para 3–1–5, para 3–5–1, para 3–5–2, etc.)

b. Determination of the active runway/s requires consideration of all known factors that may in any way affect the safety of takeoff/landing operations including the initial departure and the instrument approach phases of flight within terminal area airspace. (See FAAO JO 7110.65, para 2–1–16, para 2–1–18, para 2–6–1 thru para 2–6–5, para 3–1–8, para 3–3–1 thru para 3–5–3, etc.)

NOTE–
Example of items to be considered are: surface wind direction and velocity, wind shear/microburst alerts/reports, adjacent airport traffic flows, severe weather activity, IFR departure restrictions, environmental factors, etc.

10–1–7. USE OF ACTIVE RUNWAYS

a. Facility air traffic managers must issue a facility directive containing procedures to ensure the efficient use of runways, positive control and coordination of aircraft/vehicles on or near active runways. Authorization for aircraft/vehicles to taxi/proceed on or along an active runway, for purposes other than crossing, must be provided via direct communications on the appropriate local control frequency. This authorization may be provided on the ground control frequency after coordination with local control is completed for those operations specifically described in a facility directive.

b. Facility air traffic managers must develop procedures to be included in a facility directive for the mandatory use of an approved memory aid at the appropriate operational position/s for:

1. Runway status (CLOSED/INACTIVE)

2. Runway crossing

3. Vehicle, personnel or equipment on active runway/s

4. Land and Hold Short Operations (LAHSO)

5. Line Up and Wait (LUAW)

6. Landing clearance

c. Approved memory aids will be maintained in the Runway Safety Memory Aid Toolbox. The use of memory aids that are not maintained in the toolbox must be approved by Operations – Headquarters AJT-2 through the appropriate Service Area Director of Operations.

NOTE–
Director approved memory aids must be coordinated with Runway Safety for inclusion in the memory aid toolbox.

d. Facility air traffic managers must include local procedures in the facility directive to assist the local and ground controllers in maintaining awareness of aircraft positions on the airport.

REFERENCE–
FAAO JO 7110.65, Para 3–1–4, Coordination Between Local and Ground Controllers.
FAAO JO 7110.65, Para 3–1–7, Position Determination.

e. FAAO JO 7110.65, Air Traffic Control, contains procedures for the control of aircraft/vehicle movements on active runways. Exceptions may be authorized, upon approval by the Terminal Operations Service Area Director, to allow prearranged coordination where equivalent procedural safeguards exist to preclude a loss of separation. Exceptions must be limited to complex locations with clearly demonstrated extraordinary requirements that cannot be met through the application of the standard procedures in FAAO JO 7110.65, Air Traffic Control. The following are required:

1. A facility directive that clearly defines ground/local/cab coordinator responsibilities and contains safeguards to prevent inadvertent use of runways by local/ground/cab coordinator at the same time and do not rely solely on visual observation (look–and–go).

2. The use of the cab coordinator in runway crossing procedures must have restraints to guard against unanticipated actions by the local controller to prevent traffic conflicts. Coordinators must not approve runway crossings in front of aircraft on the runway awaiting takeoff without first coordinating with the local controller. Similar restraints should be included with regard to landing aircraft; e.g., cutoff points that ensure the runway is clear before landing aircraft arrive over the threshold. Based on a direct knowledge of the local controller's instant traffic situation, the cab coordinator may authorize ground control to conduct an operation across an active runway. The cab coordinator must ensure the timeliness of all such operations and initiate any necessary action to prevent runway crossing incidents. When not absolutely certain of local control's traffic, the cab coordinator may still effectively function as a communications link between the local controller and the ground controller.

3. A separate facility directive must explicitly outline the responsibilities of the cab coordinator in authorizing active runway crossings. This directive must address and clearly answer the questions of the cab coordinator's function, authority, and accountability in these operations. The Terminal Operations Service Area Director must review and approve this facility directive prior to its implementation.

4. The Terminal Operations Service Area Director must forward a copy of the approved facility directive to the Director of System Operations Airspace and Aeronautical Information Management.

f. Facility air traffic managers at instrumented airports with operating control towers must, in addition to the above, annually review local airport surface diagrams to ensure that the runway centerline heading information is current. This may be accomplished by comparing the posted magnetic headings of the runways shown on the airport obstruction chart, corrected to the current magnetic variation for the facility, with the heading shown on the airport surface diagram. The air traffic manager must review local departure procedures to ensure continued compatibility with the runway headings posted on the airport surface diagram.

g. Air traffic managers must develop a facility directive which specifically defines the responsibilities of local and ground control to ensure that coordination is accomplished to accommodate an aircraft exiting the runway which must enter another taxiway/runway/ramp area, other than the one used to

exit the landing runway, in order to taxi clear of the runway.

NOTE–
This directive is only required at facilities where an aircraft exiting the runway must enter another taxiway/runway/ramp area, other than the one used to exit the landing runway, in order to taxi clear of the runway.

10–1–8. PROCEDURES FOR OPENING AND CLOSING RUNWAYS

Each ATM:

a. Must ensure that the authority, responsibility, and procedures to be used when opening or closing a runway are defined in an LOA with airport management/military operations office. Items which should be addressed, if relevant, are: the use of barriers/visual aids (lighted or unlighted "X", barricades, etc.), portions of the closed runway available for ground operations such as crossings, and information for issuing NOTAMs. Other items may be included, as appropriate.

NOTE–
Only the airport management/military operations office can close or open a runway.

b. Must develop and provide a tailored checklist to be used when opening and closing a runway. A facility directive must designate the position responsible for completing the checklist. Items which should be included, if relevant, are:

1. Coordination.

(a) Airport management.

(b) Intra-facility.

(c) Inter-facility.

(d) Technical operations.

(e) Traffic management.

2. Memory aids.

3. Safety Logic System.

4. Status information area.

5. Airfield lighting.

6. NAVAIDs.

7. ATIS.

8. Entry on the daily log.

c. May increase the number of items and/or the level of detail of the opening and closing checklist as they deem necessary.

d. Must ensure that a facility directive includes procedures for the mandatory use of an approved memory aid that indicates the status of the runway (CLOSED/INACTIVE).

e. Must implement approved memory aids and develop procedures outlining their use.

NOTE–
When implementing these procedures, one should consider short-term versus long-term closures as well as planned versus unplanned processes.

REFERENCE–
FAAO JO 7110.65, Para 3-3-1, Landing Area Condition
FAAO JO 7110.65, Para 3-3-2, Closed/Unsafe Runway Information
FAAO JO 7110.65, Para 4-7-12, Airport Conditions
FAAO JO 7210.3, Para 4-7-3, System Impact Reports
FAAO JO 7210.3, Para 10-1-7, Use of Active Runways
FAAO JO 7210.3, Para 17-5-13, Electronic System Impact Reports

10–1–9. FLIGHT PROGRESS STRIP USAGE

Air traffic managers at automated terminal radar facilities may waive the requirement to use flight progress strips provided:

a. Back–up systems such as multiple radar sites/systems or single site radars with CENRAP are utilized.

b. Local procedures are documented in a facility directive. These procedures should include but not be limited to:

1. Departure areas and/or procedures.

2. Arrival procedures.

3. Overflight handling procedures.

4. Transition from radar to nonradar.

5. Transition from ATTS to non–ATTS.

c. No misunderstanding will occur as a result of no strip usage.

d. Unused flight progress strips, facility developed forms and/or blank notepads must be provided for controller use.

e. Facilities must revert to flight progress strip usage if back–up systems referred to in subpara a above are not available.

10–1–10. LOW VISIBILITY OPERATIONS

a. Facility air traffic managers must participate in developing a local SMGCS plan when the airport is under the guidelines of the National SMGCS plan.

REFERENCE–
AC 120–57, Surface Movement Guidance and Control System (SMGCS).

b. Facility air traffic managers must ensure all operational personnel are properly briefed prior to the effective date of local SMGCS plan. All air traffic procedures included in the SMGCS plan must be contained in a facility directive.

10–1–11. MOBILE CONTROL TOWERS

a. Mobile control towers must be used at FAA locations:

1. To provide services during a move from an old tower structure into a new tower.

2. When repairs, rehabilitation, or installation of new equipment make the tower structure temporarily uninhabitable.

3. During periods of natural emergency; e.g., the tower structure has been damaged by fire, accident, or wind.

4. During national emergencies as required by the DOD at FAA and non–FAA locations.

b. Mobile control towers may be used at non–FAA locations when requested by flying organizations, cities, or other political entities to assist in the operation of fly–ins, air races, etc., provided:

1. The Terminal Operations Area Office, after careful consideration of a request to use FAA personnel and/or equipment, determines that the service is required and can be made available without:

(a) Jeopardizing FAA activities.

(b) Interfering with the gainful employment of competent non–Federal personnel.

2. Non–Federal personnel selected to support the event are properly certificated and rated in accordance with 14 CFR Part 65 for the airport.

3. The requesting organization is apprised that the mobile unit is subject to immediate recall should an emergency arise.

10–1–12. PARTICIPATION IN LOCAL AIRPORT DEICING PLAN (LADP)

a. Officials, at airports operating under 14 CFR Part 107 and Part 139 subject to icing weather conditions with control towers, should develop LADPs in order to involve all interested parties in the deicing/anti–icing process. Aircraft departing from airports without a LADP are not exempt from any traffic management initiative.

b. The operators of these airports have been requested to host meetings involving airport users and air traffic in a partnership effort to achieve common solutions to local aircraft ground deicing/anti–icing problems. The emphasis is on developing local strategies that minimize the amount of time an aircraft spends on the ground after being deiced/anti–iced.

NOTE–
Deicing is the process of removing existing frozen precipitation, frost, or ice from aircraft surfaces. Anti–icing is the process of preventing accumulation of frozen contaminants on aircraft surfaces. Both processes may involve the application of various fluids to the aircraft.

c. Air traffic managers who receive requests from airport operators to participate in these meetings will use the following guidance:

1. When requested by the airport operator, the air traffic manager must participate in the development of a LADP. Since a LADP can affect an airport acceptance rate and/or departure rate, the air traffic manager must include the participation of the air traffic manager from the appropriate ARTCC, who must participate and/or utilize their traffic management unit (TMU). The plan will be reviewed and updated annually. The plan must include:

(a) A clear definition of triggering mechanism(s) used to implement the LADP, e.g., holdover tables, visible precipitation.

(b) Assignment of responsibility to notify air traffic of implementation and cessation of the LADP.

NOTE–
Air traffic facilities should not become the triggering mechanism except in rare circumstances. If air traffic is designated as the triggering mechanism, submit the proposed LADP to the Terminal Operations Service Area office for approval.

2. Develop or enhance local strategies to manage the number of aircraft at the departure

runway queues and minimize the amount of time an aircraft spends on the ground after being deiced.

3. Gate hold procedures, when used as part of a LADP, should be initiated at the time the plan is implemented. The application of gate hold procedures during deicing/anti−icing operations are not predicated on other requirements of FAAO JO 7210.3.

NOTE−
The pilot−in−command remains the final authority as to aircraft operation. Air traffic is not responsible for tracking or adherence to aircraft holdover times.

4. Coordinate the expected start time, actual start time and stop time of the LADP with the appropriate ARTCC TMU. The ARTCC TMU will forward these times to the ATCSCC.

5. Balance the airport flow to accommodate demand. Adjust the arrival rate with the departure rate. These rates should reflect the number of operations expected to occur during deicing/anti−icing conditions and facilitate minimizing the amount of time an aircraft spends on the ground after being deiced/anti−iced.

6. Aircraft operators at LADP airports are responsible for complying with issued Expect Departure Clearance Time (EDCT) times and will not be exempted from compliance with these times. However, once an aircraft has been deiced/anti−iced, it must be released unless a ground stop applicable to that aircraft is in effect. If a facility believes aircraft operators are not performing deicing/anti−icing in a manner consistent to meet the EDCT time, the facility must notify the ATCSCC through the appropriate TMU.

7. Allocate the available departure slot capacity, when departure rates are reduced because of deicing, consistent with available resources. Facilities should consider the following unprioritized list of options when developing departure allocation procedures.

(a) OPTION A: First come, first served. When departure demand exceeds capacity, the air traffic facility will minimize departure delays at the runway queue by using gatehold or an equivalent procedure.

(b) OPTION B: Air traffic will determine the departure allocation based upon the departure rate and the stated demand, obtained directly from the users, during a specified time period. For example, air traffic will coordinate with each user and receive their demand for a 15−minute time period. Then, based upon the total airport departure demand for the 15−minute time period, determine the number of flights which the user will be allocated, advise each user, and determine which flights they will use to fill their allocation.

(c) OPTION C: Airport users determine the departure allocation. Air traffic will notify the users of the departure rate in effect and the users will then advise air traffic which flights they will use to fill their allocation. Air traffic will provide input on the coordination process but will not accept an active role in developing the departure allocation.

(d) OPTION D: Air traffic determines the departure rate and informs the users of the number of operations expected during a specific time period. Air traffic determines the total percentage of each users' daily operations based upon a "typical busy day" by dividing each of the users total daily operations by the airports total daily operations. Then, air traffic determines each users hourly share by multiplying the users daily percentage times the departure rate. The users will then distribute their hourly share evenly throughout the specific time intervals.

NOTE−
1. *Air traffic may or may not take an active role in determining the percentage of each user's operations on a "typical busy day" and each user's hourly share.*

2. *If a user has only one aircraft scheduled per hour, attempts should be made to accommodate it.*

8. Provide coordination, communication, and feedback with the parties included in the plan. Coordination should take place when airports are forecast to have icing conditions, during deicing/anti−icing and after deicing/anti−icing, to effect necessary adjustments. Prior to and after each winter season, the airport participants should assess the efficiency of the airport plan and address any specific concerns.

9. Develop an air traffic facility training program. Prior to each winter deicing/anti−icing season, conduct annual controller refresher training including, but not limited to, awareness of and sensitivity to the peculiar nature of deicing/anti−icing operations, icing conditions, and minimizing delays at the runway departure queue.

10–1–13. PRECISION OBSTACLE FREE ZONE (POFZ)

Coordinate with the Airport Division and Flight Standards to determine if precision approach operations are impacted by the POFZ. ILS hold lines will need to be relocated if aircraft (vertical surfaces) or vehicles fall within the POFZ.

Section 3. Operations

10–3–1. SIGMET AND PIREP HANDLING

Facility air traffic managers must establish procedures for the prompt collection and dissemination of SIGMET, CWA, and PIREP information. These procedures must contain direction for a central source to be responsible for:

a. Soliciting and handling PIREPs in accordance with the provisions of FAAO JO 7110.65, Air Traffic Control, para 2–6–3, PIREP Information.

b. Reviewing SIGMETs and CWAs to determine the required distribution, and disseminating SIGMET and/or CWA information in accordance with the following:

NOTE–
Simply attempting to accelerate the movement of all weather data will not accomplish our objectives. Greater emphasis is being placed on screening and selective dissemination of weather data. Selective dissemination takes into account the need to alert pilots to significant weather reports in sufficient detail to assist them in making decisions pertinent to flight safety and to provide the information an ATC facility requires to promote the safe and efficient use of its airspace.

1. Disseminate pertinent information from SIGMET or CWA to other terminal ATC facilities within your terminal area.

2. Disseminate selective SIGMET and CWA information on a need–to–know basis in accordance with the provisions of FAAO JO 7110.65, Paragraph 2–6–2, Hazardous Inflight Weather Advisory Service (HIWAS).

10–3–2. WIND INSTRUMENTS AT APPROACH CONTROL FACILITIES

a. The same wind sensor may be used to provide wind information in ATCT and approach control facilities when they are located on the same airport.

b. Approach control facilities not located at the airport to which radar service is being provided may issue wind data received from the tower at that airport. The wind data may be transmitted to the approach control facility by TelAutograph, data communication circuit, voice lines, etc.

c. The facility air traffic manager of an approach control that provides radar service to an Air Force Base must identify facility requirements for wind indicators, in writing, to the local USAF Air Weather Service Commander.

10–3–3. LOW LEVEL WIND SHEAR/ MICROBURST DETECTION SYSTEMS

a. Procedures for the dissemination of wind information derived from the Low Level Wind Shear Alert System (LLWAS) or other automated wind shear detection systems, are contained in FAAO JO 7110.65, para 3–1–8, Low Level Wind Shear/Microburst Advisories. Guidance to facility air traffic managers concerning the operational use of the LLWAS is as follows:

1. Prior to operational use of LLWAS facilities, a letter to airmen must be published explaining, as a minimum, the location and designation of the remote sensors, the capabilities and limitations of the system, and the availability of current LLWAS remote sensor wind information if requested by the pilot. A new letter to airmen must be issued whenever changes to the above minimum criteria or system upgrade/modifications are made.

NOTE–
The LLWAS may be retained as a backup system no longer than 6 months after the WSP has been commissioned.

2. At positions of operation where installed, LLWAS airport wind information appearing on the tower LLWAS display may be used in place of the direct dial or commissioned AWOS/ASOS automated display wind information.

NOTE–
Towers having the responsibility for weather observations must comply with the requirements as specified in sub–para 2–10–1a, Wind Instrument Sensors.

3. TRACONs may use direct dial, LLWAS, or commissioned AWOS/ASOS automated display wind information for operational purposes.

4. Facility managers may designate the use of displayed wind information oriented to the threshold end of the runway in lieu of airport winds where LLWAS expanded network systems or LLWAS that are integrated with TDWR are installed, if deemed operationally advantageous.

5. The LLWAS airport, direct dial, or commissioned AWOS/ASOS automated winds may be used during outages of the sensors that provide threshold winds:

(a) Include in the letter to airmen an explanation that wind information given to arriving aircraft on that runway/s may be derived from the automated AWOS/ASOS wind equipment or wind sensor equipment near the runway threshold rather than from the LLWAS airport wind source. It is not intended that controllers specify the remote source when issuing these winds to arriving aircraft, except when an alert occurs. This must be explained in the letter to airmen.

(b) Use wind information derived from commissioned AWOS/ASOS for ATIS broadcasts and issuing weather reports. Wind information from commissioned AWOS/ASOS or LLWAS centerfield may be used when issuing surface wind to departing aircraft.

REFERENCE–
Para 2–10–1, Wind Instrument Sensors.

b. When it is determined that a component or the whole LLWAS has failed, take the following action: If a component such as a remote sensor fails, notify airway facilities. During periods when wind shear is likely to occur or has been reported; e.g., frontal activity, thunderstorms, or pilot reports, inform users by broadcasting on the ATIS that the component is out of service.

EXAMPLE–
"Low level wind shear west boundary sensor out of service."

c. Technical Operations is responsible for the verification of the accuracy of the LLWAS. The SMO will notify air traffic of any equipment that is out of tolerance.

10–3–4. RELAY OF RVV/RVR VALUES

a. Relay of RVV/RVR values from the weather observing facility to the control tower may be discontinued at the request of the tower when there is no traffic activity at that specific location.

b. Establish relative priorities on the visibility information at locations with two or more RVR or RVV runways where data is required for two or more runways.

10–3–5. ADVANCE APPROACH INFORMATION

Where more than one position could issue the data, assign responsibility for issuing advance approach information to a specific position in a facility directive. Display the information so that it is readily accessible to the controller having a need for it.

10–3–6. ILS HEIGHT/DISTANCE LIMITATIONS

a. An ILS is normally flight checked to 4,500 feet and 18 miles for the localizer and to 4,500 feet and 10 miles for the glide slope.

b. If an operational need to exceed these limitations exists, ATC submits an Expanded Service Volume (ESV) request IAW 8260.19, with a description of the flight procedure requiring it. Flight inspection must validate the ESV.

10–3–7. LAND AND HOLD SHORT OPERATIONS (LAHSO)

a. The air traffic manager must determine a valid operational need exists before conducting simultaneous takeoff and landing or simultaneous landing operations. This need may be considered evident if:

1. Present airport capacity/acceptance rate will be increased; and

2. Arrival/departure delays will be reduced; and

3. A reasonable savings in fuel consumption will result.

b. Before authorizing simultaneous takeoff and landing or simultaneous landing operations as specified in the current LAHSO directive.

1. Coordinate with each of the appropriate Flight Standards field offices having jurisdiction at the airport according to the type of aircraft operations involved and with user groups as required by para 4–2–4, Coordination of ATC Procedures, including the appropriate military authority where units are based at the airport.

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

2. Prepare a facility directive using the information as specified in the current LAHSO directive prescribing procedures for conducting these

operations. The directive must contain a diagram that depicts the airport runway configuration, identifies the configuration to be used, and specifies the Available Landing Distance (ALD) from the landing threshold to the Hold–Short Point.

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

REFERENCE–
FAAO JO 7110.65, Para 3–10–4, Intersecting Runway Separations.

3. Ensure the directive identifies the eligible aircraft which may operate on each runway, based on the ALD, current LAHSO directive, and/or FAAO JO 7110.65, Appendix A, Aircraft Information.

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

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

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

REFERENCE–
FAAO 1050.1, Policies and Procedures for Considering Environmental Impacts.

NOTE–
This is only applicable to those facilities not currently conducting SOIR operations.

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

a. The ATM must:

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

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

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

(a) Local procedures for conducting these operations.

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

REFERENCE–
FAAO JO 7210.3, Para 10–1–7, Use of Active Runways.

(c) The consolidation and staffing of positions.

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

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

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

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

REFERENCE–
FAAO JO 7110.65, Para 3–9–4, Line Up and Wait (LUAW), subpara c1
FAAO JO 7110.65, Para 3–10–5, Landing Clearance, subpara b

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

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

REFERENCE–
FAAO JO 7110.65, Para 3–9–4, Line Up and Wait (LUAW), subpara c1 and g.

(g) Fleet mix.

REFERENCE–
FAAO JO 7110.65, Para 3–9–6, Same Runway Separation.
FAAO JO 7110.65, Para 3–9–7, Wake Turbulence Separation for Intersection Departures.
FAAO JO 7110.65, Para 3–9–8, Intersecting Runway Separation.

(h) Traffic volume; complexity restrictions.

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

4. Local control position must not be consolidated/combined with any other non–local control position. For example, local control must not be consolidated/combined with the front–line manager/controller–in–charge (CIC) position, clearance delivery, flight data, ground control, cab coordinator, etc. Local control can be combined with other local control positions to include tower associate (local assist) or local monitor position. When a Class B/helicopter position with defined control tower airspace is established, this position can be combined with local control.

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

6. The front–line manager/CIC position should not be combined with any other position.

7. Ensure front–line managers/CICs review para 2–6–1a, Watch Supervision, with an emphasis on maintaining situational awareness and management of the operational environment with a goal toward eliminating distractions.

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

(a) The runway is used as a departure–only runway.

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

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

(d) At least 90 days before planned implementation, ATMs must submit the local directive outlining this operation for Terminal Operations and Terminal Safety and Operations Support approval. Terminal Operations and Terminal Safety and Operations Support directors must be notified of any proposed operational changes (for example, a change to the runway or taxiway for conducting LUAW operations).

b. ATMs must submit operational need for LUAW and a facility directive to the appropriate Director, Terminal Operations (service area office) for approval. ATMs must maintain a copy of the approval correspondence from Terminal Operations.

c. The Director, Terminal Operations, must ensure an annual review of LUAW operations is conducted for those facilities employing LUAW. The results of this review must be sent to the Terminal Safety and Operations Support office by September.

10–3–9. TAKEOFF CLEARANCE

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

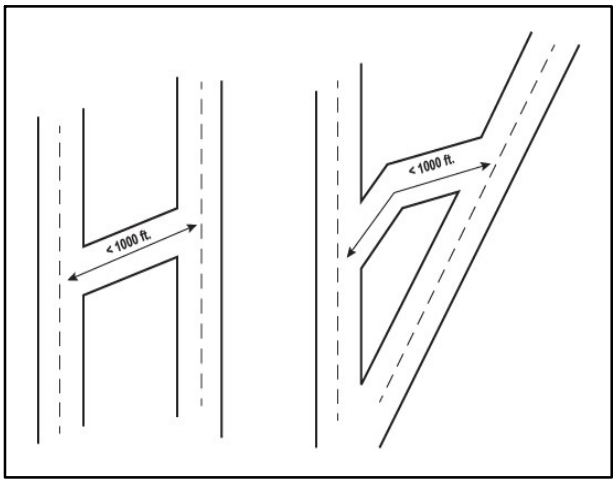
REFERENCE–
FAAO JO 7110.65, Para 3–9–9, Takeoff Clearance.
Pilot/Controller Glossary Term – Clear of the Runway.

10–3–10. MULTIPLE RUNWAY CROSSINGS

a. Air traffic managers at airports where the taxi route between runway centerlines is less than 1,000 feet must submit a request to the appropriate Terminal Services Director of Operations for approval before authorizing multiple runway crossings.

REFERENCE–
FAAO JO 7110.65, Para 3–7–2, Taxi and Ground Movement Operations

FIG 10–3–1
Multiple Runway Crossings



b. The request must address the specific locations where multiple runway crossings will be authorized. This must only include locations where the intervening taxi route is less than 1,000 feet between runway centerlines.

e. Where possible, radio contact points and the routes between them and the airport are different from those used by IFR flights.

f. Pilot participation is encouraged rather than required, and compliance with the procedures is not made mandatory.

10–4–5. PRACTICE INSTRUMENT APPROACHES

a. VFR aircraft practicing instrument approaches at the approach control's primary airport must be provided IFR separation in accordance with FAAO JO 7110.65, Air Traffic Control, Chapter 4, Section 8, Approach Clearance Procedures.

NOTE–
The primary airport is the airport from which approach control service is provided, except for remoted facilities where the facility air traffic manager will designate the primary report.

b. IFR separation to VFR aircraft in accordance with FAAO JO 7110.65, Chapter 4, Section 8, Approach Clearance Procedures, must be provided to all secondary airports under the approach control's jurisdiction to the extent possible within existing resources. Where separation service is provided to an airport with a FSS that provides LAA, or a nonapproach control tower, provisions for handling such aircraft must be included in a LOA.

c. Where IFR separation is not provided to VFR aircraft conducting practice approaches, instruct the aircraft to maintain VFR and provide traffic information.

d. At airports where the tower does not provide approach control service, handle practice instrument approaches in accordance with a LOA between the tower and the facility providing approach control service.

e. Facilities must issue a letter to airmen advising the users of those airports where IFR separation is provided for VFR aircraft conducting practice instrument approaches. The letter should specify which facility will handle the aircraft practicing instrument approaches and include the appropriate frequencies.

REFERENCE–
Para 4–5–2, Letters to Airmen.

10–4–6. SIMULTANEOUS INDEPENDENT APPROACHES

a. Simultaneous independent approaches may be conducted when:

1. Dual parallel runway centerlines are at least 3,600 feet apart, or dual parallel runway centerlines are at least 3,000 feet apart with a 2.5° to 3.0° offset approach to either runway and the airport field elevation is 2,000 feet MSL or less.

NOTE–
Airport field elevation requirement does not apply to dual parallel runways that are 4,300 feet or more apart.

2. Triple parallel approaches may be conducted under one of the following conditions:

(a) Parallel runway centerlines are at least 3,900 feet apart and the airport field elevation is 2,000 feet MSL or less; or

(b) Parallel runway centerlines are at least 3,000 feet apart, a 2.5° to 3.0° offset approach to both outside runways, and the airport field elevation is 2,000 feet MSL or less; or

(c) Parallel runway centerlines are at least 3,000 feet apart, a single 2.5° to 3.0° offset approach to either outside runway while parallel approaches to the remaining two runways are separated by at least 3,900 feet, and the airport field elevation is 2,000 feet MSL or less.

b. Instrument approach procedures are annotated with "simultaneous approach authorized".

c. Equipment required to maintain communication, navigation, and surveillance systems is operational with the glide slope exception as noted below.

d. During glide slope outages, facilities may continue to conduct simultaneous independent approaches without vertical guidance for a period of no more than 29 days, provided the following requirements are identified in an Air Traffic Safety Oversight Service (AOV) approved contingency plan. Submit glide slope outage contingency plans for approval to the Director, Operations–Headquarters for processing. At a minimum, the following special provisions, conditions, and limitations must be identified in the plan, if applicable, along with any other facility–specific requirements:

1. An LOA with the ATCT (or facility directive for a combined facility) must contain a description of

the procedures, requirements, and any limitations as specified in the facility contingency plan for glide slope out of service procedures.

2. The ATC facility must notify Technical Operations personnel of the glide slope outage.

REFERENCE–
FAAO JO 7210.3, Para 3–5–2, System Component Malfunctions

3. The ATC facility must notify arriving pilots that the glide slope is out of service. This can be accomplished via the ATIS broadcast.

4. Any other requirements specified in the local facility contingency plan for glide slope out procedures must be complied with before conducting simultaneous independent approach procedures.

5. Controllers must be trained and provided annual refresher training concerning the application of these procedures.

6. The ATC facility must record when the glide slope outage occurs and any adverse impact on the operation on FAA Form 7230–4, Daily Record of Facility Operation.

7. Any loss of separation or break out associated with operations under a contingency plan for glide slope out must be reported to the Director, Operations- Headquarters.

8. The facility must have radar coverage down to the decision altitude or minimum descent altitude, as applicable.

9. Approaches must be terminated to the runway without a glide slope whenever the reported visibility is below the straight–in localizer minimum for that runway.

10. Any required equipment for the approach with the glide slope out of service must be operational, such as DME or VORTAC.

e. Simultaneous approaches with the glide slope unusable must be discontinued after 29 days unless granted a Letter of Authorization by AOV. (See Appendix 4.)

f. When simultaneous approaches are being conducted, the pilot is expected to inform approach control, prior to departing an outer fix, if the aircraft does not have the appropriate airborne equipment or they do not choose to conduct a simultaneous approach. Provide individual handling to such aircraft.

g. Facility directives must state that final monitor aid displays not be configured in FUSION, when conducting final monitor activities.

10–4–7. SIMULTANEOUS WIDELY–SPACED PARALLEL OPERATIONS

a. Simultaneous independent approaches to widely-spaced parallel runways without final monitors may be conducted when:

1. Instrument approach procedures are annotated with "Simultaneous Approach Authorized."

2. A separate approach system is required for each parallel runway. A minimum distance of more than 9,000 feet between centerlines is required when approaches are conducted at airports with field elevations at or below 5,000 feet MSL, or 9,200 feet between runway centerlines is required with a field elevation above 5,000 feet MSL. Other integral parts of the total Simultaneous Approach System include radar, communications, ATC procedures, and appropriate airborne equipment.

3. Weather activity is closely monitored that could impact the final approach course. Weather conditions in the vicinity of either final approach course may dictate a change of the approach in use.

4. All turn-ons and final approaches are monitored by radar. Since the primary responsibility for navigation rests with the pilot, instructions from the controller are limited to those necessary to ensure separation between aircraft. Information and instructions are issued as necessary to contain the aircraft on the final approach course. Aircraft which are observed deviating from the assigned final approach course are instructed to alter course left or right, as appropriate, to return to the desired course. Unless altitude separation is assured between aircraft, immediate action must be taken by the controller monitoring the adjacent parallel approach course to require the aircraft in potential conflict to alter its flight path to avoid the deviating aircraft.

5. Missed approach procedures are established with climbs on diverging courses. To reduce the possibility of error, the missed approach procedure for a single runway operation should be revised, as necessary, to be identical with that of a simultaneous approach operation.

6. Separate radar and local control positions are established for each final approach course.

b. Record the time the operation begins and ends on the facility log.

c. Where possible, establish standard breakout procedures for each simultaneous operation. If traffic patterns and airspace permit, the standard breakout altitude should be the same as the missed approach altitude.

d. Provide individual handling to an aircraft when the crew informs you that the aircraft does not have the appropriate airborne equipment or they choose not to conduct a simultaneous approach.

e. Facility ATMs must ensure authorized approach pairings, when one or both of the aircraft are conducting an RNAV (RNP) approach with RF legs, are identified in a Facility Directive and a Letter of Agreement (LOA), if applicable.

REFERENCE–
FAAO JO 7110.65, Paragraph 5-9-10, Simultaneous Independent Approaches to Widely-Spaced Parallel Runways Without Final Monitors

10–4–8. SIMULTANEOUS CONVERGING INSTRUMENT APPROACHES

a. The procedures to conduct Simultaneous Converging Instrument Approaches (SCIA) must be developed in accordance with the following paragraphs.

1. The ATM must:

(a) Determine that the volume and complexity of aircraft operations requires the use of simultaneous converging instrument approaches. Additionally, no adverse impact on the users or air traffic control facilities can result from the implementation of the procedure.

(b) Coordinate with airport operations to ensure that runway intersection identification markings are in accordance with appropriate standards if the runways intersect.

(c) Coordinate with the responsible Service Area Flight Procedures Team (FPT) through the service area Operations Support Group (OSG) for the feasibility of SCIA procedural design and the ability to achieve minimums sufficient to justify procedural development. The FPT must consider all aspects of the approach, including NAVAIDS, approach lighting, and airport lighting.

(d) Prepare a staff study which includes:

(1) Type of aircraft and user groups that will be involved in SCIA operations.

(2) Anticipated effect on airport/ airspace capacity, including projected reductions in departure delays, airport acceptance rate and projected savings in aircraft fuel consumption.

(3) Daily time periods during which the procedure would be applied.

(4) A preliminary environmental assessment in accordance with FAA Order 1050.1, Environmental Impacts: Policies and Procedures (See paragraph 4-1-6, Preliminary Environmental Review).

2. After completing steps 1 through 4 above, the ATM must:

(a) Submit the request for SCIA operations, to include the completed staff study and a draft graphic of the ILS-Standard Instrument Approach Procedure, to their OSG for review.

(1) The OSG must coordinate the procedure with the regional Flight Standards Division.

(2) When approved, the OSG will process the package through the FPT for development.

(b) Develop a Letter to Airmen defining local procedures to be used at least 30 days before the effective date. Additional means of publicizing local procedures must be employed in accordance with paragraph 4-2-4, Coordination of ATC Procedures.

b. The requirements for conducting SCIA operations to converging runways are:

1. Operational air traffic control radar.

2. Precision instrument approach procedures must be established on each runway.

3. Non intersecting final approach courses.

4. SIAP specifically titled “Converging” and is published in parenthesis after the title of the procedure, for example, ILS V Rwy 17 (Converging).

(a) Missed approach points (MAP) must be at least 3 nautical miles (NM) apart, and

(b) Published missed approach procedures diverge by at least 45 degrees.

(c) The ATM must designate a primary and secondary runway for SCIA runway configurations including separation responsibility and procedures to

be applied in the event a missed approach is initiated inside the MAP.

(d) Flight Procedures will determine the appropriate approach minimums for both primary and secondary runways for each SCIA configuration.

5. Converging approaches must not be conducted simultaneously to runways that intersect, when the ceiling is less than 1,000 feet or the visibility is less than 3 miles.

6. Converging approaches to runways that do not intersect may be conducted when the ceiling is less than 1,000 feet or visibility less than 3 miles provided all other conditions of this directive are met.

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

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

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

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

(c) Coordination requirements,

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

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

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

1. Only straight-in approaches must be made.

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

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

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

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

10–4–9. PRECISION RUNWAY MONITOR–SIMULTANEOUS OFFSET INSTRUMENT APPROACHES

a. Precision Runway Monitor–Simultaneous Offset Instrument Approaches (PRM–SOIA) may be conducted at airports with dual parallel runways with centerlines separated by at least 750 feet and less than 3,000 feet, with one straight–in Instrument Landing System (ILS) and one Localizer Directional Aid (LDA), offset by2.5 to 3.0 degrees using a PRM system with a 1.0 second radar update system in accordance with the provisions of an authorization issued by the Director of Terminal Safety and Operations Support in coordination with AFS. A high–resolution color monitor with alert algorithms, such as a final monitor aid (FMA) must be required.

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

c. Closely monitor weather activity that could impact the final approach course. Weather conditions in the vicinity of either final approach course may dictate a change of the approach in use. (See para 10–1–6, Selecting Active Runways, subpara b Note.)

d. All turn–ons and final approaches are monitored by radar. Since the primary responsibility for navigation rests with the pilot, instructions from the controller are limited to those necessary to ensure separation between aircraft and to prevent aircraft from penetrating the NTZ. Information and instructions are issued, as necessary, to contain the aircraft's flight path within the Normal Operating Zone (NOZ). Aircraft which are observed approaching the No Transgression Zone (NTZ) are instructed to alter course left or right, as appropriate, to return to the desired course. Unless altitude separation is assured between aircraft, immediate action must be

taken by the controller monitoring the adjacent parallel approach course to require the aircraft in potential conflict to alter its flight path to avoid the deviating aircraft.

e. Missed approach procedures are established with climbs on diverging courses. To reduce the possibility of error, the missed approach procedure for a single runway operation should be revised, as necessary, to be identical with that of the PRM–SOIA operation.

f. Where possible, establish standard breakout procedures for each simultaneous operation. If traffic patterns and airspace permit, the standard breakout altitude should be the same as the missed approach altitude.

g. The following requirements must be met for conducting PRM–SOIA:

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

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

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

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

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

i. Where possible, establish standard breakout procedures for each simultaneous operation. If traffic patterns and airspace permit, the standard breakout altitude should be the same as the missed approach altitude.

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

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

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

3. For runways less than 2,500 feet apart, whenever the ceiling is less than 500 feet above the MVA, wake vortex spacing between aircraft on adjacent final approach courses as described in FAAO JO 7110.65, Air Traffic Control, para 5–5–4, Minima, must be applied unless acceptable mitigating techniques and operational procedures are approved by the Director of Terminal Safety and Operations Support pursuant to an AFS safety assessment. A request for a safety assessment must be submitted to the Terminal Safety and Operations Support Office through the service area office manager. The wake turbulence mitigation techniques employed will be based on each airport's specific runway geometry and meteorological conditions and implemented through local facility directives.

4. All applicable wake turbulence advisories must be issued.

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

l. For any new proposal to conduct PRM–SOIA, an operational need must be identified by the ATC facility manager, validated by the service area office manager, and forwarded to the Terminal Safety and Operations Support Office for appropriate action. The statement of operational need should identify any required site specific procedures.

10–4–10. REDUCED SEPARATION ON FINAL

Separation between aircraft may be reduced to 2.5 NM in–trail separation on the final approach course within 10 NM of the runway provided an average Runway Occupancy Time (ROT) of 50 seconds or less is documented for each runway. ROT is the length of time required for an arriving aircraft to proceed from over the runway threshold to a point clear of the runway. The average ROT is calculated by using the average of the ROT of no less than 250 arrivals. The 250 arrivals need not be consecutive but must contain a representative sample of the types of aircraft that use the runway. Average ROT documentation must be revalidated within 30 days if there is a significant change in runway/taxiway configuration, fleet mix, or other factors that may increase ROT. Revalidation need not be done for situations that are temporary in nature. Only the ROT for the affected runway(s) will need to be revalidated. All validation and revalidation documentation must be retained and contain the following information for each arrival:

a. Aircraft call sign.

b. Aircraft type.

c. Time across the threshold.

d. Time clear of the runway.

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

REFERENCE–
FAAO JO 7110.65, Subpara 5–5–4f, Minima.

10–4–11. MINIMUM IFR ALTITUDES (MIA)

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

NOTE–
1. *For guidance in the preparation and review of Minimum IFR Altitude charts see FAAO 7210.37, En Route Minimum IFR Altitude (MIA) Sector Charts.*

2. *This may be accomplished by appending the data on sector charts or MVA charts; Special translucent sectional charts are also available. Special ordering information is contained in FAAO 1720.23, Distribution of Aeronautical Charts and Related Flight Information Publications. (Reference – para 3–8–2.)*

Chapter 11. National Programs

Section 1. Terminal VFR Radar Services

11–1–1. PROGRAM INTENT

Basic Radar Service, TRSA Service, Class B and Class C services are the four types of Radar Services designed to enhance safety by providing air traffic services to VFR aircraft. The services were designed to provide the maximum level of radar services possible with existing equipment. Additional resources (displays, communications, telco, space, etc.) must be justified by requirements other than the volume of radar service provided to VFR aircraft. Pilots should be encouraged to participate by all available methods. This is best accomplished through effective procedures and a clear understanding of the Terminal VFR Radar Services available.

REFERENCE–
Pilot/Controller Glossary Term– Terminal VFR Radar Services.
FAAO JO 7110.65, Chapter 7, Section 6, Basic Radar Service to VFR Aircraft– Terminal.

11–1–2. IMPLEMENTATION

a. Facilities unable to meet the following requirements must submit justification to the respective Terminal Operations Area Office:

1. Newly commissioned terminal radar facilities must implement basic radar services to VFR aircraft, as prescribed in FAAO JO 7110.65, Air Traffic Control, para 7–6–1, Application, within 30 to 60 days after full IFR service is available. All radar facilities must provide basic radar service at primary airports and, where operationally feasible, at satellite airports with a control tower.

2. TRSA Service: In addition to basic radar service, provide separation between all participating aircraft operating in an established TRSA. If a need exists, facilities may develop coded VFR departure routes for TRSA service. When such routes are established, the following provisions apply:

(a) Prior to implementing coded VFR departure routes, the facility must coordinate with local user groups.

(b) A letter to airmen must be issued advising pilots of the procedure.

(c) These routes must only be issued to local users familiar with the procedure.

(d) Detailed departure instructions must be furnished when requested by the pilot.

3. Facility air traffic managers must address in writing, as a minimum, the following pertinent factors when submitting for service area office approval, either a recommendation for revision or withdrawal of an existing TRSA.

(a) Safety record/NMAC analysis.

(b) Airspace and operational efficiency.

(c) Unique geographical features.

(d) Hourly air carrier traffic density.

(e) User input. (User meetings, while highly desirable, are not required for withdrawals.)

b. Revisions to TRSAs must be submitted to System Operations Airspace and Aeronautical Information Management, NFDC, at least 9 weeks prior to one of the appropriate publication dates; i.e., Sectional Charts, Notice to Airmen, or the Chart Supplement U.S. The following are considered sufficient justification to warrant revision:

1. Changes in configuration, frequencies, or primary airport status (name, elevation, closed, abandoned, etc.).

2. Additions or deletions to the VFR checkpoints/NAVAIDs.

3. Typographical errors.

c. Advertising Basic Radar Services:

1. A sufficient number of user group meetings must be held to publicize implementation of basic radar services to as many local pilots as practicable.

2. Disseminate a letter to airmen explaining the program and including a drawing of the basic radar service area. The drawing should be on a cutout from the appropriate sectional chart and should show the following:

(a) Lateral and vertical dimensions.

(b) Frequency for each sector.

(c) Initial VFR checkpoints indicated by flags.

3. The facility air traffic manager must seek the cooperation of the FSDO in informing aviation interests about their responsibilities while operating in a basic radar service environment. Special emphasis should be placed on such points as:

(a) Pilot participation is urged, but it is not mandatory.

(b) Pilots should be aware that aircraft sequencing and traffic advisories are primarily based on aircraft maintaining assigned headings and altitudes.

(c) If a pilot cannot abide with an ATC instruction or clearance, he/she should notify ATC immediately.

4. Follow–up meetings ("HOW GOES IT" type) must be conducted.

11–1–3. TRSA

a. TRSAs are not officially designated by airspace action and were established solely to define an area within which a separation service will be provided. Therefore, at all TRSA locations it is intended that facilities must provide the full extent of TRSA services throughout the entire advertised TRSA area. Although the TRSA area extends downward to the surface within the surface area of Class D airspace at the primary airport, a base should be established outside this surface area of Class D airspace to permit free movement of nonparticipating aircraft. The base of the TRSA must not be below the base of an associated Class E airspace.

b. The size and shape (laterally/vertically) of the TRSA will vary depending upon operational requirements. However, each TRSA must reflect the most efficient and reasonable configuration to contain large turbine–powered aircraft while achieving a higher level of overall safety.

NOTE–
There is no requirement for the TRSA facility to retain operational jurisdiction of the airspace in its entirety if another facility can more effectively manage a particular portion of the airspace. The requirement is that the system provides the required service.

c. All IFR procedures used by large turbine–powered aircraft arriving and departing designated airports must be fully contained in the TRSA. Each TRSA should be configured to ensure the most efficient use of airspace.

d. Arriving and departing large turbine–powered aircraft should enter/exit the TRSA through the ceiling. However, arriving aircraft at altitudes below the ceiling are not required to climb to achieve this objective, nor are departing aircraft filed at lower altitudes.

11–1–4. CLASS C AIRSPACE

Class C airspace must be officially designated by airspace action in 14 CFR Part 71 and is established solely to define the airspace in which all aircraft are subject to operating rules and equipment requirements specified in 14 CFR Part 91.

NOTE–
While the regulatory nature of this airspace requires pilots to establish two–way communications with ATC prior to entering, aircraft should not be unnecessarily prohibited from entering Class C airspace.

a. Facility managers who determine a need for Class C airspace establishment must prepare and submit a staff study in accordance with FAAO JO 7400.2, Procedures for Handling Airspace Matters.

b. The physical dimensions of the Class C airspace will normally be a 10 NM radius capped at 4,000 feet above the primary airport elevation. This airspace must extend no lower than 1,200 feet above the surface, except that an inner core with a 5 NM radius must extend down to the surface.

c. Encompassing each Class C airspace must be a site specific Outer Area with a normal radius of 20 NM. The Outer Area must extend outward from the primary Class C airspace airport and extend from the lower limits of radar/radio coverage up to the ceiling of the approach control delegated airspace excluding the Class C airspace and other airspace as appropriate.

d. After issuance of the final rule designating a Class C airspace, user education meetings must be held to publicize implementation of Class C service to as many pilots as practicable.

e. Issue a letter to airmen explaining the program and including a drawing of the Class C airspace. The drawing should depict, as a minimum, the following:

1. The lateral and vertical dimensions of the Class C airspace and the associated Outer Area.

2. Any procedural exclusions when the Class C airspace overlaps an adjacent Class D airspace.

3. Initial VFR checkpoints located outside the Class C airspace.

4. Frequencies.

f. Followup meetings ("HOW GOES IT" type) must be conducted after implementation.

g. Exceptions to Class C services may be established within the Class C airspace for special activities; i.e., practice areas, banner tows, gliders, ultralights, etc., provided the procedures are outlined in a letter of agreement with the users.

h. Where the Class C airspace overlaps the Class D airspace of an adjacent airport, facility managers must include in a letter of agreement procedures defining responsibility for the control of aircraft in the overlapping area.

i. The *National Terminal Radar Program* includes military as well as civil airports. Each case of military airport inclusion or establishment of Class C airspace must be processed through appropriate military channels for thorough examination and individual justification.

j. When recommending a location for withdrawal from the Class C airspace, facility air traffic managers must prepare and submit a staff study to Washington headquarters, Airspace and Rules through the appropriate Terminal Operations Service Area Office in accordance with FAAO JO 7400.2, Procedures for Handling Airspace Matters.

11–1–5. CLASS B AIRSPACE

a. Class B airspace must be officially designated by airspace action in 14 CFR Part 71 and is established solely to define the airspace in which all aircraft are subject to operating rules and pilot and equipment requirements specified in 14 CFR Section 91.131.

b. The size and shape (laterally/vertically) of the Class B airspace will vary depending upon operational requirements. However, each Class B airspace must reflect the most efficient and reasonable configuration to contain large turbine–powered aircraft while achieving a higher level of overall safety.

NOTE–
There is no requirement for the Class B airspace facility to retain operational jurisdiction of the airspace in its entirety if another facility can more effectively manage a particular portion of the airspace. The requirement is that the system provide the required service.

c. All IFR procedures used by large turbine–powered aircraft arriving and departing designated airports must be fully contained in the Class B airspace. Each Class B airspace should be configured to ensure the most efficient use of airspace.

d. Arriving and departing large turbine–powered aircraft should enter/exit the Class B airspace through the ceiling. However, arriving aircraft at altitudes below the ceiling are not required to climb to achieve this objective, nor are departing aircraft filed at lower altitudes.

e. Procedures must be developed to accommodate VFR aircraft desiring to transit the Class B airspace. If VFR corridors are published, recommend the establishment of frequency 122.750 for pilots to exchange position information when transiting the associated Class B airspace VFR corridor.

being used, a brief written report must be sent to the Terminal Operatons Service Area Office whenever they are inhibited. A copy of the report must be sent to Terminal Safety and Operations Support.

c. Facility air traffic managers are authorized to inhibit CA at specific operating positions if an operational advantage will occur.

d. Facility air traffic managers must ensure that:

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

2. A visual inspection and aural test of the MSAW speakers located in the operational quarters by supervisory personnel is included as part of the equipment check list required during each watch. The purpose of this inspection is to ensure the aural alarm is functioning and audible to the appropriate operational personnel.

3. The operational support facility has adapted the software functionality to ensure the aural alarms operate in the ATCT.

4. Aural alarms are received in the ATCT upon transfer of communications.

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

6. Tower aural alarm areas are identified.

11–2–8. MAGNETIC VARIATION OF VIDEO MAPS/GEO MAPS AT ARTS FACILITIES

Air traffic managers must ensure that:

a. The magnetic variation of radar video maps/geo maps, MSAW, DTMs/GTMs and radar site settings coincide and is verified annually.

b. Affected map or maps are recompiled when the official magnetic variation of record is changed/implemented.

NOTE–
1. *The video map is the primary reference for maintaining radar antenna alignment.*

2. *The DTM is constructed to align with the radar antenna offset for magnetic north. Consequently, any change in antenna offset will result in a corresponding change in the relative positions of the terrain points and obstacles used to determine DTM bin altitude assignments. This will require generating and verifying a new DTM.*

3. *The GTM is constructed to align with true north offset by the site adaptable radar antenna magnetic variation. Consequently, any change in antenna offset will result in a corresponding change in the relative position of bin locations.*

4. *In both cases, DTM or GTM, any change in antenna offset will result in readaptation of the MSAW and CA databases; e.g., airport areas, inhibit volume areas, capture boxes, etc., to coincide with the changed declination.*

5. *Technical Operations Aviation System Standards has the responsibility to assign and maintain the Magnetic Variation of record for navigational facilities and airports.*

REFERENCE–
Para 11–2–9, MSAW DTM Cartographic Certification, Updates, and Recompilation.
FAAO 8260.19, Flight Procedures and Airspace.

11–2–9. MSAW DTM CARTOGRAPHIC CERTIFICATION, UPDATES, AND RECOMPILATION

a. System Operations Airspace and Aeronautical Information, must be responsible for assuring that the National Aeronautical Charting Office (NACO) performs the certification of the terrain elevations and the obstacle elevations. Each new or recompiled MSAW DTM must be certified by the NACO through the AT/NACO Precise Geographic Position and Elevation Program (PREGPEP). Also, NACO must certify the periodic update of the MSAW obstacle elevation files.

b. The MSAW DTM must be recompiled by NACO if:

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

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

NOTE–
Requests for new or recompiled DTMs are routed to System Operations Airspace and Aeronautical Information.

11–2–10. DIGITAL MAP VERIFICATION

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

Section 4. Charted VFR Flyway Planning Chart Program

11–4–1. DEFINITION

VFR flyways are general flight paths not defined as a specific course, for use by pilots in planning flights into, out of, through, or near complex terminal airspace to avoid Class B airspace. An ATC clearance is NOT required to fly these routes.

11–4–2. CRITERIA

Use the following criteria for establishing VFR Flyway Planning Charts:

a. Flyway Course: The flight paths used to describe VFR flyways, must, to the maximum extent practicable, reference ground objects that can be readily identified from the air. If necessary, and if an operational benefit can be derived, radio NAVAID references may be used.

b. Flyway Altitudes: Each segment of a charted VFR flyway should contain recommended altitudes.

1. Recommended altitudes must avoid airspace requiring prior authorization or clearance to enter.

2. Care should be exercised to avoid recommending altitudes which could cause the aircraft on a flyway to encounter inflight wake turbulence generated by large aircraft.

3. When altitude changes are required, they should be based on a descent rate of 250–350 feet per nautical mile.

c. Altitude Compression: Charted VFR flyways established under the floors of Class B airspace require careful evaluation to avoid compression of the airspace and the altitudes available for VFR operations.

d. Military Considerations: Avoid establishing VFR Flyways which would conflict with military ground control radar approach paths. When charting VFR flyways which cross or are in proximity to an MTR, include communications instructions for pilots to determine the status of the MTR.

e. Once a flyway is charted, it will only be moved when it significantly interferes with other operations.

11–4–3. RESPONSIBILITIES

a. Flyway Development: The facility air traffic manager develops requirements for VFR flyways charting. All actions leading to the development of a VFR Flyway Planning Chart should be initiated by the facility air traffic manager.

1. Initial Action: The requesting facility air traffic manager must establish a task force of air traffic, FSDO, military, and local aviation interests, as appropriate, to recommend where the charted VFR flyways should be located.

2. Flyway Justification: As a minimum, the facility air traffic manager must address in writing the following pertinent factors:

(a) Background information pertaining to the development of the chart, such as the composition of the task group.

(b) The major areas examined.

(c) Special VFR procedures.

(d) Recommendations by the task group.

(e) Reasons supporting the establishment of a VFR Flyway Planning Chart for the area.

3. Charts and Description: A narrative description of the flyway and the appropriate VFR Terminal Area Chart or a drawing must depict the following data:

(a) VFR flyway flight paths with named visual checkpoints, NAVAID magnetic radials, and altitudes;

(b) Any large turbine–powered aircraft arrival/departure routes that cross the charted VFR flyway;

(c) Procedural notes positioned on the drawing or the VFR TAC; and

(d) The communication frequencies if frequencies are recommended for advisories. Indicate the flyway segment/s associated with each frequency.

b. Flyway Approval: Terminal Operations Service Area Offices are responsible for approving the proposed VFR Flyway Planning Charts and ensuring that they comply with the prescribed criteria. If approval is granted, the Terminal Operations Area

Offices must forward the proposal to System Operations Airspace and Aeronautical Information Office at least 9 weeks prior to the planned implementation date. The planned implementation date must coincide with a publication date of the respective VFR TAC.

c. Annual Review: Terminal Operations Area Offices are responsible for reviewing existing VFR Flyway Planning Charts on an annual basis to determine their continued need.

d. Revision to Flyways: In order that System Operations Airspace and Aeronautical Information Office can meet its responsibilities, revisions to VFR Flyway Planning Charts must be submitted to System Operations Airspace and Aeronautical Information Office at least 9 weeks prior to the publication date of the respective VFR Terminal Area Chart. Revisions may be initiated by the facility air traffic manager or the Terminal Operations Area Office. The following are considered sufficient justification to warrant revision:

1. Changes, additions, or deletions to VFR flyways or altitudes, frequencies, procedural notes, or changes to airport status; i.e., name, closed, abandoned, etc.

2. Changes in large turbine−powered aircraft arrival/departure routes.

3. Additions or deletions to checkpoints/ NAVAIDs.

e. Publicity: The facility air traffic manager must seek the cooperation of the FSDO in informing aviation interests about the VFR Flyway Planning Chart Program. Special emphasis should be placed on:

1. Pilot adherence to flyways and recommended altitudes is voluntary.

2. Flyways are not devoid of IFR or military traffic. They represent flight paths that are believed to have the least IFR or military activity.

3. A “see and avoid” environment must be maintained and emphasized.

Section 5. Helicopter Route Chart Program

11–5–1. POLICY

a. The Helicopter Route Chart Program has been established to enhance helicopter access into, egress from, and operation within high density traffic areas by depicting discrete and/or common use helicopter routes, operating zones, and, where necessary, radio frequencies. The program had been designed to improve operational safety in areas where significant helicopter operations occur, and to establish a systematic process for chart development, modification, and acquisition.

b. Pilot adherence to charted helicopter routes and the recommended altitudes or flight ceilings associ–ated with them will normally be voluntary. However, controllers may assign charted routes and altitudes and expect or request pilot compliance with them, provided such procedures are called for in specific FAA–operator Letters of Agreement, or are necessitated by traffic density and/or safety considerations; controllers also may restrict operations within designated operating zones when requested by local law enforcement officials and the restriction would not adversely affect other aircraft operations.

c. Helicopter route charts must be published individually, on a site–specific basis. They are not updated on a regular basis as are other visual charts. They will be updated when a significant number of changes have accumulated, or when safety related or major airspace modifications warrant the printing of a new chart. The *Dates of Latest Editions,* published by the National Ocean Service will serve as a notice when a new chart is about to be published and which editions of charts are currently in use.

11–5–2. DEFINITION

Helicopter Route Charts are graphic portrayals of discrete and/or common use helicopter routes and/or operating zones located in high density traffic areas; their purpose is to facilitate helicopter pilot access into, egress from, or operation within charted areas. They generally will include associated altitude or flight ceiling information to facilitate IFR traffic avoidance and pilot adherence to minimum safe altitude requirements. The charts provide expanded, and in some cases unique, ground reference symbology to improve visual navigation.

11–5–3. CRITERIA

Use the following criteria when determining the need for a new or revised helicopter route chart:

a. Routes:

1. Recommended altitudes/flight ceilings/floors must avoid restricted/military airspace requiring prior authorization or clearance to enter.

2. All routes depicted on a helicopter route chart must, to the maximum extent practicable, reference ground objects that can be readily identified from the air.

b. Operating zones: Airspace encompassed by a helicopter route chart must, when necessary and required by operational considerations, be divided into a sufficient number of operating zones or sectors to permit local law enforcement agencies to operate within them on an exclusive basis.

c. Altitudes and flight ceilings/floors: Each segment of a helicopter route may contain recommended altitudes or flight ceilings/floors. It is the discretion of the local air traffic tower if such altitudes will be depicted, or, assigned at a later date when the pilot contacts the tower.

1. Recommended altitudes/flight ceilings/floors must avoid airspace requiring prior authorization or clearance to enter.

2. Care should be exercised to avoid recommending altitudes or flight ceilings/floors which could cause helicopters operating on a designated route to encounter inflight wake turbulence generated by large, fixed wing traffic.

3. When altitude/flight ceiling changes are required, they should be based on a descent rate of 250–350 feet per nautical mile.

d. Communications information: Each helicopter route chart must include sufficient radio communications information to permit pilot compliance with all pertinent regulatory requirements, and facilitate the acquisition and dissemination of air traffic advisory information.

e. Military considerations: Avoid establishing helicopter routes or operating zones which would conflict with military ground control radar approach paths. When charting a route or operating zone which crosses or is located in close proximity to a MTR, include communications instructions that will permit pilots to determine the status of the MTR.

f. Helicopter routes may be changed or modified whenever a new chart is updated. It is recommended that all route modifications be coordinated with operating groups in the local area.

11–5–4. RESPONSIBILITIES

a. Helicopter route chart development: Facility air traffic managers are responsible for determining the need for chart development or revision, and for compliance with the following:

1. Initial action: Facility air traffic managers who desire to establish a new route chart or revise an existing chart must establish a task force or planning group comprised of local air traffic, FSDO, military, law enforcement, and helicopter operator personnel to recommend the area of chart coverage and the paths, routes, and operating zones that will comprise it.

2. Justification: All recommendations for new and/or revised charting must include justifying information that includes, as a minimum, the following information:

(a) Background information pertinent to chart development or revision, including the composition of the task force or planning group;

(b) The airspace areas and proposed routes, operating zones, and altitude/flight ceiling/floor considerations examined;

(c) Special VFR procedural implications;

(d) Task force or planning group recommendations; and

(e) Supporting rationale.

3. Charts and description: Facility air traffic managers must provide a narrative description or drawing of the chart area, including:

(a) Identification of all integral routes or operating zones, with named visual checkpoints and elevations, and associated altitude or flight ceiling limitations;

(b) Any IFR routes that fall within the charted area;

(c) Procedural notes pertinent to operations within the charted area or an operating zone, and on designated routes; and

(d) Traffic advisory radio communications frequencies and ATC facility names associated with area, route, or zone operations.

b. Chart approval: Terminal Operations Service Area Directors are responsible for reviewing and approving new or revised helicopter route chart proposals, and assuring that they comply with all prescribed criteria. However, procedural implementation may not occur until the proposal has been reviewed by System Operations Airspace and Aeronautical Information Management, and subsequently published. Consequently, managers should forward their approved packets through System Operations Airspace and Aeronautical Information Management as far in advance of the desired publication/implementation date as possible.

NOTE–
The publication lead times for new charts and minor chart revisions will routinely approximate 6–9 months and 3–4 months, respectively.

c. Annual review: Terminal Operations Service Area Directors are responsible for the conduct of annual reviews of existing VFR helicopter route charts to determine their accuracy and continued utility.

d. Chart revisions:

1. Revisions to existing helicopter route charts may be initiated by any facility air traffic manager, but can only be approved by the Terminal Operations Service Area Directors. However, to assure completion of all requisite Airspace and Rules review and publication requirements, proposals must be submitted through System Opererations Airspace and Aeronautical Information Management to Airspace and Rules at least 6–9 months or 3–4 months (as appropriate) prior to their expected or recommended implementation date.

2. The following are considered sufficient justification for a revision:

(a) Changes, additions, or deletions to area coverage, designated routes or operating zones,

controlling agencies and/or frequencies, procedural notes, or airport/heliport/helistop status;

(b) Changes in IFR routes within the chart coverage area; and

(c) Additions or deletions to visual checkpoints.

e. Publicity: Facility air traffic managers must seek the cooperation of local FSDO personnel in informing local aviation interests about the Helicopter Route Chart Program. Special emphasis should be placed on:

1. The voluntary nature of pilot adherence to designated routes, operating zones, altitudes/flight ceilings, and procedural notes;

2. The importance of chart use to operational safety and IFR traffic avoidance; and

3. The "see and avoid" nature of operations within the chart area.

Section 6. Terminal Area VFR Route Program

11–6–1. POLICY

a. The Terminal Area VFR Route Chart Program has been developed to assist pilots operating under VFR who do not wish to communicate with ATC to avoid airspace requiring such contact.

b. Pilot adherence to Terminal Area VFR Routes, and the recommended altitudes associated with them, is strictly voluntary and in no way relieves pilots from requirements to comply with all applicable Federal Aviation Regulations.

11–6–2. DEFINITION

Terminal Area VFR Routes are specific flight courses depicted on the chart(s), which may include recommended altitudes, and described by reference to electronic navigational aids and/or prominent visual landmarks for optional use by pilots to avoid Class B, Class C, and Class D airspace while operating in complex terminal airspace. An ATC clearance is not required to fly these routes.

11–6–3. CRITERIA

Use the following criteria for establishing Terminal Area VFR Routes:

a. Routes:

1. Recommended routes should avoid the flow of IFR traffic.

2. Recommended routes must, to the maximum extent practical, reference prominent landmarks that can be readily identified from the air.

3. The course must be described by magnetic compass headings and latitude/longitude. Radio aids to navigation may be used as supplemental course guidance when feasible.

b. Recommended Altitudes: Each segment of a route must have recommended minimum/maximum altitudes.

1. Recommended altitudes must avoid airspace requiring prior ATC authorization or contact to enter.

2. Recommended altitude must be in accordance with VFR cruising altitudes.

3. Recommended altitudes must avoid areas of expected wake turbulence from large aircraft.

4. Altitude changes should be based on climb/descent rate of 250–350 feet per nautical mile.

5. Recommended altitudes beneath the floors of Class B and Class C airspace, require careful evaluation to avoid compression of uncontrolled traffic.

c. Military considerations: Avoid establishing routes which conflict with military ground control radar approach paths. Recommended routes which cross or are close to MTR should include communication instructions to allow pilots to determine MTR status.

11–6–4. RESPONSIBILITIES

a. Terminal Area VFR Route Development: Terminal Operations Service Area Directors are responsible for determining the need for recommended routes and for compliance with the following:

1. Initial action: Terminal Operations Service Area Directors desiring to establish recommended routes must form a task group consisting of local air traffic, FSDO, military, and other interested parties.

2. Justification: Recommendations for routes must include as a minimum:

(a) Background information including composition of the task group.

(b) Airspace areas, proposed routes, recommended altitudes, and other pertinent considerations.

3. The task force must develop descriptions of the recommended routes which must include as a minimum:

(a) Arrival/departure airports.

(b) Latitude/longitude of each turning point on the route. The description must include a sufficient number of points to establish the desired turn radius. NAVAID data may be included if appropriate: e.g., VOR radials.

(c) Recommended altitudes for each route segment and flight status: i.e., level, climbing, or descending.

(d) A list of recommended VFR checkpoints (including latitude/longitude) may be included, if appropriate.

b. Route Review: Terminal Operations Service Area Directors are responsible for reviewing recommended VFR routes and for ensuring that they comply with all prescribed criteria. Terminal Operations Service Area Directors must submit route descriptions to the System Operations Airspace and Aeronautical Information Management in a tabular format suitable for publication in the National Flight Data Digest without additional processing.

c. Annual Review: Terminal Operations Service Area Directors must as a minimum, on an annual basis, review routes and submit revisions to System Operations Airspace and Aeronautical Information Management in format described above.

d. Route Revisions: The System Operations Airspace and Aeronautical Information Management office, must ensure that route descriptions/revisions submitted by Service Area offices are published in the National Flight Data Digest for the use of chart makers and other interested parties.

Section 7. Standard Terminal Automation Replacement System (STARS)

11–7–1. OPERATIONAL USE

a. Do not use STARS data when the system is released to Technical Operations Services.

b. Verify the operational status of all STARS components daily.

c. Advise effected facilities when STARS equipment will not be operational at normal startup time, when it fails, is shut down, resumes operation, or when interfacility mode is lost/regained.

11–7–2. DATA ENTRIES

Facility directives must prescribe the use of the scratch pad and the specific responsibility for entering the current ATIS alpha character, the current general system information (GSI), and the system altimeter setting. When an ARTS facility serves more than one controlled airport, an average of the altimeter settings for those airports may be specified as the system altimeter setting. A remote altimeter setting may be used in accordance with para 2–10–4, Comparison Checks, in the event that all local altimeter indicators fail. Do not use this procedure whenever conditions indicate the probability of a steep pressure gradient between two locations.

11–7–3. DISPLAY DATA

a. When a malfunction causes repeated discrepancies of 300 feet or more between the automatic altitude readouts and pilot reported altitudes, request the AUS or Technical Operations personnel to inhibit the automatic altitude report (Mode C) display until the malfunction has been corrected.

b. Display Mode C on untracked (unassociated) targets within each controller's area of responsibility by setting the altitude filters to encompass all altitudes within the controller's jurisdiction. Set the upper limits no lower than 1,000 feet above the highest altitude for which the controller is responsible. In those stratified positions, set the upper and lower limit to encompass at least 1,000 feet above and below the altitudes for which the controller is responsible. When the position's area of responsibility includes down to an airport field elevation, the facility will normally set the lower altitude filter limit to encompass the field elevation, so that provisions of FAAO JO 7110.65, Air Traffic Control, para 2–1–6, Safety Alert, and subpara 5–2–17a2, Validation of Mode C Readout, may be applied. Air traffic managers may authorize the temporary suspension of this requirement when target clutter is excessive.

REFERENCE–
FAAO JO 7110.65, Para 5–2–23, Altitude Filters.

11–7–4. USE OF STARS QUICK LOOK FUNCTIONS

a. Where STARS data from a system common to the TRACON and the tower is presented on the TDW or supplemental display in the tower cab, and if operational benefits will accrue by using the QUICK LOOK function, a facility directive or a LOA must be prepared specifying:

1. Procedures for data transfer between the TRACON and the tower cab.

2. Communications changeover points.

3. Transfer of control points.

4. Hours or conditions under which facility policy prohibits use of these functions.

5. The responsibility of the local control position to determine whether use of QUICK LOOK function is satisfactory or some other mode of data transfer is to be used; e.g., voice call or computer handoff.

b. Factors to be considered by the controller in determining use of the QUICK LOOK function and by the facilities for prohibiting their use include, but are not limited to, light on the face of the TDW or supplemental display, traffic volume, other duties requiring the controller's attention, and the number of controllers available in the tower.

11–7–5. AUTOMATION PROGRAM CHANGES

The air traffic manager of STARS facilities must:

a. Approve all requests for automation changes sent to the respective Operational Support Facility

via the National Automation Request form, FAA Form 6000−14.

b. Review each SITE PROGRAM BULLETIN (TERMINAL) issued by the Terminal Automation Support for local program functionality, and changes to the data base to determine any operational/procedural impact. When necessary:

1. Issue a facility directive describing the functional change/s and any resulting procedural change/s.

2. Coordinate any functional, procedural, and airspace change/s with the ARTCC providing automation interface.

c. Ensure that operational suitability acceptance for software modifications is recorded on FAA Form 7230−4.

EXAMPLE−
"National operating system suitability testing completed, acceptable."

11−7−6. AUTOMATIC ACQUISITION/TERMINATION AREAS

a. Facility air traffic managers must:

1. Establish automatic acquisition areas for arrivals and overflights at ranges permitting auto−acquisition of targets prior to the ARTCC/STARS−to−STARS automatic handoff area when the center is in the surveillance data processing (SDP) mode.

2. Coordinate with the adjacent automated facilities to ensure that computer handoffs will be initiated only after the aircraft is within their facility's automatic acquisition area. Where this is not feasible due to airspace assignment, facility directives must require use of an appropriate procedure specified in FAAO JO 7110.65, Air Traffic Control, to confirm the identity of all aircraft handed off prior to ARTS auto−acquisition.

3. Establish automatic acquisition areas for departing aircraft 1 mile or less from the runway end.

4. Establish automatic termination areas for arriving aircraft 1 mile or less from the runway threshold or, at satellite airports, the minimum radar coverage range/altitude whichever is greater.

5. Prescribe in a facility directive the operating position responsibility for determining if automatic acquisition of a departure track has occurred.

NOTE−
This is intended for operations where automatic acquisition responsibility could be confused, e.g., uncontrolled airports within a single sector, or between different radar sectors that serve the same airport.

b. Terminal Operations Service Area Directors may authorize a distance greater than specified in subparas 3 and 4 above, where the operational conditions dictate.

11−7−7. MINIMUM SAFE ALTITUDE WARNING (MSAW) AND CONFLICT ALERT (CA)

a. When their continued use would adversely impact operational priorities, facility air traffic managers may temporarily inhibit the MSAW, the Approach Path Monitor portion of MSAW, and/or the CA functions. Except when equipment or site adaptation problems preclude these functions being used, a brief written report must be sent to the respective Terminal Operations Area Office whenever they are inhibited. A copy of the report must be sent to Terminal Safety and Operations Support.

b. Facility air traffic managers are authorized to inhibit CA at specific operating positions if an operational advantage will accrue.

c. MSAW Digital Terrain Maps (DTMs) must be kept current.

d. Terminal Operations Area Offices must:

1. Furnish STARS facilities a copy of:

(a) Newly received FAA Forms 7460−2, Notice of Actual Construction or Alteration.

(b) Emergency Notices of Construction of structures of 200 feet or more above ground level lying within 60 NM of their radar site.

2. Ensure that the daily *National Flight Data Digest* (NFDD) is provided to STARS facilities and other offices when it affects their area of jurisdiction.

e. Facility air traffic managers must ensure that:

1. The material described in subpara d1 above, is reviewed and that appropriate corrections to the DTM are made.

2. The magnetic variation of the facility's DTM coincides with the magnetic variation of the facility's radar video maps/geo maps.

NOTE–
The DTM is constructed to align with the radar antenna offset for magnetic north. Consequently, any change in antenna offset will result in a corresponding change in relative positions of the terrain points and obstacles used to determine DTM bin altitude assignments. This will require not only generating and verifying a new DTM, but also readapting the MSAW and CA data bases; e.g., airport areas, inhibit volume areas, capture boxes, etc., to coincide with the changed declination.

REFERENCE–
Para 11–2–8, Magnetic Variation of Video Maps/Geo Maps at ARTS Facilities.

3. MSAW parameters are modified, as appropriate, to minimize the extent of inhibit areas as specified in the Standards and Guidelines for STARS.

4. An aural test of the MSAW speakers located in the operational quarters is included as part of the equipment checklist required during each watch. The purpose of this test is to ensure the aural alarm is functioning and audible to the appropriate operational personnel.

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

6. Tower aural alarm areas are identified.

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

11–7–8. MAGNETIC VARIATION OF VIDEO MAPS/GEO MAPS AT STARS FACILITIES

Air traffic managers must ensure that the magnetic variation of radar video maps/geo maps, MSAW, DTMs, and radar site settings coincide. The magnetic variation must be verified annually and a change of 2 degrees or more requires a recompiling of the effected map or maps.

NOTE–
The video map is the primary reference for maintaining radar antenna alignment.

REFERENCE–
Para 11–8–7, Minimum Safe Altitude Warning (MSAW) and Conflict Alert (CA).
Para 11–8–9, MSAW DTM Cartographic Certification, Updates, and Recompilation.

11–7–9. MSAW DTM CARTOGRAPHIC CERTIFICATION, UPDATES, AND RECOMPILATION

a. System Operations Airspace and Aeronautical Information Management must be responsible for assuring that the National Aeronautical Charting Office (NACO) performs the certification of the terrain elevations and the obstacle elevations. Each new or recompiled MSAW DTM must be certified by the NACO through the Air Traffic/NACO Precise Geographic Position and Elevation Program (PREGPEP). Also, NACO must certify the periodic update of the MSAW obstacle elevation files.

b. The MSAW DTM must be recompiled by the NACO if:

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

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

NOTE–
Requests for new or recompiled DTMs are routed to System Operations Airspace and Aeronautical Information Management. The NACO *requires approximately ten weeks to build and deliver a DTM.*

11–7–10. DIGITAL MAP VERIFICATION

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

11–7–11. MODE C INTRUDER (MCI) ALERT PARAMETERS

a. Use the nominal value of parameters specified in the appropriate NAS Configuration Management Document and Site Program Bulletins for the MCI Alert functions, except for the base altitude parameter, as specified in subparas b or c below,

unless a waiver to adjust the base altitude parameter value is received from System Operations Security.

b. MCI Alert base altitude must be set at any value between ground level and 500 feet AGL at the discretion of the facility air traffic manager. Any instance of base altitudes above 500 feet AGL must be documented and forwarded to System Operations Security, through the respective Terminal Operations Area Office.

c. Facility air traffic managers are authorized to temporarily adjust the MCI Alert base altitude at a sector(s)/position(s) when excessive MCI Alerts derogate the separation of IFR traffic. For the purpose of this section, temporary is considered to be of less than 4 hours duration, not necessarily continuous, during any calendar day. The following is required when MCI base altitude is adjusted:

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

2. Documentation must be forwarded to System Operations Security if it is determined that a temporary adjustment of the MCI base altitude does not meet the needs of the sector/position.

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

11–7–12. OPERATIONAL MODE TRANSITION PROCEDURES

a. Facilities must develop and maintain current detailed procedures for transition to and from the various automated and nonautomated modes of operation.

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

b. The transition plans must include as a minimum:

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

2. Specific transition procedures.

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

(a) Transition decision authority.

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

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

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

11–7–13. RADAR SELECTION PROCEDURES

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

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

b. The selection plans must include as a minimum:

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

2. Specific radar selection procedures.

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

(a) Radar selection decision authority.

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

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

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

11–7–14. MULTI–SENSOR RADAR OPERATIONS

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

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

b. The plans must include as a minimum:

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

2. Specific multi–sensor radar procedures.

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

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

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

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

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

11–7–15. SINGLE SITE COVERAGE ATTS OPERATIONS

Facilities may adapt all sort boxes within 40 miles of the antenna to that site as preferred and with the single site indicator set to permit the use of 3 miles radar separation as defined in FAAO JO 7110.65, Air Traffic Control, subpara 5–5–4b3, Minima. This adaptation may be used provided:

a. A significant operational advantage will be obtained using single site coverage. Consideration must be given to such aspects as terminal interface, radar reliability, etc.; and

b. Facility directives are issued to:

1. Define areas within 40 NM of any radar site in which the adaptation has been modified.

2. Permit 3 NM separation in the modified area.

3. Accommodate local procedural changes.

Section 8. Safety Logic Systems Front−Line Manager/CIC Procedures

11−8−1. SYSTEM OPERATION

a. Safety logic systems are software enhancements to the ASDE−3 and Airport Surface Detection Equipment System − Model X (ASDE−X) that predict the path of aircraft landing and/or departing, and/or vehicular movements on runways. Visual and aural alerts are activated when the safety logic projects a potential collision.

1. Airport Movement Area Safety System (AMASS) is a safety logic system enhancement to the ASDE−3.

2. ASDE−X safety logic is a system enhancement to ASDE−X.

b. The safety logic system must be operated in a full core alert runway configuration. (In ASDE−X, when rain configuration is selected, it includes full core alerting capabilities.)

c. In the event of a Multilateration (MLAT) failure, ASDE−X will stay operational. In this case, ASDE−X will operate in radar−only mode. The system automatically transitions to radar−only mode when it senses an MLAT fault. No action is required by the operator to enable radar−only mode.

1. The controller displays will keep maps and track data. Tracks that were currently being tracked when MLAT failed will keep their data blocks while in the coverage area. Tracks on arrival with ASR coverage will also keep a data block while in the coverage area. Tracks moving from a radar−only mode zone to a fully operational zone will display the tracks as it enters the operational zone.

2. New tracks will start as unknown icons and must be manually tagged to receive a data block. ASDE−X safety logic processing is not affected by radar−only mode operation. The system automatically transitions to normal operation once the MLAT subsystem is back online. Full core alerting capabilities are provided in radar−only mode.

d. When ASDE−3 and/or AMASS is in maintenance mode, AMASS data must be considered invalid and the system must be taken offline. The front−line manager/CIC must validate, upon resuming normal AMASS operations, that runway configurations and other user settings are adequate for operational use.

NOTE−
Action to change AMASS online/offline status is a technical operations function. ASDE−X safety logic will automatically be disabled when the system is in maintenance mode.

e. When a runway becomes unavailable for aircraft operations for an extended period of time, the runway should be entered as "closed" in the safety logic system. Facility procedures should be developed to address using the safety logic system in this capacity.

f. Construction projects in the vicinity of runways may cause nuisance or false alerts. It is the responsibility of air traffic facility management to mitigate alerts.

1. Air traffic facilities must use the ASDE-X "Inhibit Area" map feature to manage construction related alerts when possible.

2. National Airway Systems Engineering (NAS Engineering) is able to assist facilities that do not have access to the ASDE-X "Inhibit Area" map feature to manage construction related alerts. Facilities must contact NAS Engineering for assistance 30 to 45 days before construction via email at 9−AMC−ATOW−ASDES@faa.gov.

g. Changes to the airport movement areas which require updated ASDE-X Maps can be provided by NAS Engineering. Facilities must contact NAS Engineering for assistance 30 to 45 days before construction via email at 9−AMC−ATOW−ASDES@faa.gov.

h. ASDE−X false targets may be temporarily track dropped after positive verification has been done by pilot/vehicle operator position report or controller visual observation. When a false target is temporarily dropped, it must be noted on FAA Form 7230−4, Daily Record of Facility Operation.

REFERENCE−
FAAO JO 7110.65, Para 3−6−2, Identification.

i. The air traffic manager may authorize a real target to be inhibited from safety logic processing when the target will likely generate a nuisance alert.

11–8–2. ENSURE STATUS

a. The front–line manager/CIC is responsible for ensuring that the Safety Logic System is set for the correct runway configuration.

b. The front–line manager/CIC must ensure that the operational status of the Safety Logic System is known to all operational personnel.

c. When a status change is made to the Safety Logic System all personnel assigned an operational position must be notified verbally.

d. When any status change is made to the Safety Logic System it must be noted on FAA Form 7230–4, Daily Record of Facility Operation. Such status must be shown in the facility Status Information Area (SIA). The front–line manager/CIC must ensure that all outages are carried over on applicable logs.

11–8–3. MONITOR ALERTS AND ENSURE CORRECTIVE ACTION

a. The front–line manager/CIC must ensure that the Safety Logic System is monitored and all alerts are complied with.

b. All Safety Logic System alerts generated must be documented on FAA Form 7230–4. If unable to determine the origin of an alert, treat the alert as false and notify Technical Operations so that corrective action can be taken.

REFERENCE–
Pilot/Controller Glossary Term– Safety Logic System Alerts.

11–8–4. RAIN CONFIGURATION

a. Due to the required sensitivity of surface movement radars, numerous false targets may be generated by moderate to extreme precipitation. During these periods the ASDE–X and AMASS Safety Logic Systems should be operated in rain configuration. Should precipitation of this magnitude occur or be imminent, rain configuration may be applied to avoid the likelihood of false alerts.

b. When the event that led to placing the system into rain configuration is no longer a factor, the Safety Logic System must be reset to a normal configuration.

NOTE–
When AMASS is in rain configuration all safety logic alerts with the exception of arrivals to a closed runway are inhibited and AMASS is not in full core alert status.

11–8–5. LIMITED CONFIGURATION

a. Under certain circumstances, there may be a need to operate the Safety Logic System in limited configuration. The limited configuration must only be used to temporarily inhibit persistent false alerts. The term "persistent false alert" refers to frequent false alerts caused by continuous or repetitive circumstances. False alerts caused by random events or circumstances of short duration are not considered "persistent false alerts." The determination of "persistent alerts" is at the discretion of each front–line manager/CIC.

b. Due to the required sensitivity of surface movement radars, numerous false targets may be caused by precipitation of moderate or greater intensity. Should precipitation of this magnitude occur or be imminent at locations where ASDE does not have rain configuration availability, limited configuration may be applied to avoid the likelihood of false alerts.

c. When it is necessary to operate the ASDE–X Safety Logic System in limited configuration due to "persistent false alerts," notify Technical Operations so that corrective action can be taken.

d. When an AMASS false alert is received, limited configuration must only be used until Technical Operations verifies that the system is functioning properly and that the data necessary to analyze the alert has been obtained. Analysis and resolution of the circumstances surrounding the false alert will be determined by Technical Operations at a later date.

e. When limited configuration is applied, it must be noted on FAA Form 7230–4, Daily Record of Facility Operation, including the reason for the configuration change. Ensure that all limited configurations are carried over on applicable logs.

NOTE–
1. *For AMASS, the limited configuration disables all alerts except arrivals to a closed runway and is not considered full–core alert status.*

2. *For ASDE–X the limited configuration disables all alerts except arrivals to and departures on a closed runway and is not considered full–core alert status.*

11–8–6. WATCH CHECKLIST

The Safety Logic System status must be included in the facility watch checklist. At a minimum, the following items must be reviewed:

a. Operational status.

b. Runway configuration.

c. Presentation of the Safety Logic System data on all ASDE system displays.

d. When test button is activated, the aural alert is heard, and the speaker volume is adequate.

Section 9. VFR Waypoint Chart Program

11–9–1. POLICY

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

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

11–9–2. DEFINITION

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

11–9–3. CRITERIA

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

a. Applications.

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

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

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

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

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

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

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

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

b. VFR chart depiction:

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

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

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

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

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

11–9–4. RESPONSIBILITIES

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

b. Air traffic facilities must:

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

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

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

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

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

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

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

(e) Justification/supporting rationale.

c. The Service Area OSG must:

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

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

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

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

5. Conduct annual reviews.

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

1. Review the incoming VFR waypoint proposals for completeness.

2. Verify that the requested five–letter "VP" combinations are available for use.

3. Forward the package to En Route and Visual Charting Group, Visual Charting Team for verification of the geographic positions.

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

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

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

e. Visual Charting Team must:

1. Review the incoming VFR waypoint proposals for completeness.

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

that require FAA Form 8260–2 revisions; provide the National Flight Data Center with verification that geographic positions are ready for publication in the NFDD.

3. Coordinate with the National Flight Data Center to ensure that any new or revised VFR checkpoints are published in the NFDD.

4. Publish VFR waypoint geographic positions in the Chart Supplement U.S. and on appropriate VFR charts.

Part 4. FLIGHT SERVICE STATIONS

Chapter 13. Flight Service Operations and Services

Section 1. General

13–1–1. OPERATING POSITION DESIGNATORS

a. The following designators may be used to identify operating positions in an FSS. (See TBL 13–1–1.)

TBL 13–1–1
Operating Position Designators

	Designator	*Position*
1.	AA	Airport Advisory
2.	BC	Broadcast
3.	C	Coordinator
4.	DSC	Data Systems Coordinator
5.	FD	Flight Data
6.	IF	Inflight
7.	N	NOTAM
8.	OM	Operations Manager
9.	OS	Operations Supervisor
10.	PF	Preflight
11.	STMCIC	Supervisory Traffic Management Coordinator–in–Charge
12.	WO	Weather Observer

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

13–1–2. TEMPORARY FSS

a. Employ temporary FSSs to assure that the aviation public is afforded adequate services. Temporary facilities may be established when requested by flying organizations, cities, and other political subdivisions to assist in the operation of fly–ins, air races, etc.

b. Each request for a detail of FAA personnel and/or equipment should be carefully considered with regard to the actual need for the service. When it is determined that the service is required and that the required personnel/equipment can be made available without jeopardizing FAA activities, Flight Services Operations Service Area Offices should accede to the request.

13–1–3. FLIGHT PLAN AREA

The Chart Supplement U.S. lists each public use airport and its associated FSS. As changes occur, determine the flight plan area assignments as follows:

a. The Flight Services Safety and Operations Group must assign a new airport to the nearest FSS regardless of regional boundaries. This criterion must also be used as the determining factor for establishing flight plan areas or airport reassignments associated with FSS commissioning, decommissioning, or functional changes.

b. Make adjustments to the flight plan area assignment through interfacility coordination with Flight Services Safety and Operations Group approval.

c. Where databases are shared, facility managers may develop local procedures to facilitate the handling of flight data across flight plan area boundaries.

EXAMPLE–
An aircraft departs Dillingham but activates a VFR flight plan with Kenai Radio. Since both facilities share a database, Kenai may activate the flight plan, providing local procedures have been developed.

13–1–4. ICSS INTRODUCTORY ANNOUNCEMENT

a. FSS facilities using ICSS equipment must provide an introductory announcement to alert pilots they are accessing the ICSS system.

EXAMPLE–
WELCOME TO THE (facility name) FLIGHT SERVICE STATION. FOR FLIGHTS OUTSIDE OF UNITED STATES CONTROLLED AIRSPACE, CHECK DATA AS SOON AS PRACTICAL AFTER ENTERING FOREIGN AIRSPACE, AS OUR INTERNATIONAL DATA MAY BE INACCURATE OR INCOMPLETE. ADVISE THE

BRIEFER YOU HAVE THE INTERNATIONAL CAUTIONARY ADVISORY. TOUCH−TONE USERS MAY PRESS (appropriate code) FOR A BRIEFER OR (appropriate code) FOR THE MAIN MENU OF SERVICES. IF YOU ARE USING A PULSE OR ROTARY TELEPHONE, PLEASE REMAIN ON THE LINE AND YOUR CALL WILL BE SEQUENCED FOR THE NEXT AVAILABLE BRIEFER.

b. Newly commissioned facilities may expand the introductory announcement to include additional access instructions until users become familiar with the system− for a period not to exceed 6 months from the date of system commissioning.

c. With Flight Services Operations Service Area Office approval, facilities may add additional menu instruction for special purpose requirements, e.g., coastal route, TIBS sectorization, etc.

Section 2. Position/Service Information Binders

13–2–1. RESPONSIBILITY

a. The air traffic manager must provide position binders to include, but not be limited to, procedures for accomplishing position related duties and responsibilities as outlined below. Additionally, examples and formats must be included for seldom used procedures. Cross references to documents and lists contained in other publications may be used where applicable. The air traffic manager may assign those functions, detailed below, to the appropriate position(s) as facility needs dictate but must provide those items appropriate for each position in the binders.

b. The air traffic manager must retain one copy of the completed facility standard operating procedures directive in the operations area and distribute applicable sections to the positions to which they apply.

13–2–2. BOUNDARIES

Flight Plan Area: Provide a narrative and/or graphic depiction of the flight plan area. This includes areas covered when accepting flight plan responsibility for part–time facilities.

13–2–3. POSITIONS/SERVICES

a. Broadcast:

1. Define broadcast area and list outlets.

2. List locations and weather products.

3. Specify broadcast hours.

b. Pilot Briefing:

1. List and/or specify preflight briefing display.

2. Specify flight plan handling procedures.

c. In–Flight:

1. Document aircraft contacts.

2. List control frequencies/dial code information.

3. Specify local airport advisory/remote airport information service (RAIS)/remote airport advisory (RAA) procedures.

4. Specify SVFR procedures.

5. Specify aircraft orientation/emergency pro–cedures.

6. Specify PIREP handling procedures.

7. Specify procedures for altimeter check.

d. NOTAM Handling:

1. List authorized sources/telephone numbers. Data may be stored and displayed electronically, where available.

2. Specify NOTAM dissemination procedures.

3. Specify NOTAM currency/display proced-ures.

e. Flight Data:

1. Specify military flight plan handling/co-ordination procedures.

2. Specify notification procedures for military training activities, including MTRs and MOAs.

3. Specify IFR/Defense VFR (DVFR), ADIZ, Canadian, Mexican, and ICAO procedures with examples.

4. Specify customs notification procedures.

5. Specify search and rescue notification procedures.

6. List airport search/contact telephone num-bers.

Chapter 14. Aviation Meteorological Services and Equipment

Section 1. General

14–1–1. FAA–NWS AGREEMENT

By interagency agreement, FAA and NWS cooperate in providing aviation meteorological services to the aviation public. This cooperation is designed to provide maximum service within the combined capabilities of the two agencies.

14–1–2. CERTIFICATES OF AUTHORITY

a. FSS personnel must obtain a certificate of authority from the FAA before performing the following functions:

1. Weather observing.

2. Pilot weather briefing.

REFERENCE–
FAA Order JO 7220.4, FAA Certification of Pilot Weather Briefing

14–1–3. LIAISON WITH AVIATION INTERESTS

a. Because of their aviation service responsibilities, FSS supervisors should establish and maintain cordial relations with aviation interests within their flight plan areas. They should keep apprised of aviation users' weather and aeronautical information needs and assist them in making effective use of the available services. This liaison should include other FAA facilities, NWS facilities, airport management, airline and military operations offices, fixed base operators, pilot organizations, and Civil Air Patrol (CAP).

b. Some aviation operations (e.g., emergency medical flights) require time critical services. Immediate dispatch of the mission is imperative and delays in obtaining required weather and aeronautical information may be life endangering. FSS managers must cooperate to the fullest extent possible with organizations making requests for special arrangements to satisfy their requirement.

14–1–4. TELEPHONE LISTINGS

FSS air traffic managers must ensure that appropriate telephone numbers are properly listed in telephone directories (including yellow pages when applicable) and in the Chart Supplement U.S. Include TEL–TWEB (Alaska only), and Fast File in the local directories, and ensure that Foreign Exchange, Enterprise, etc., are listed in the directories of the areas which they serve. Numbers should always be listed under the subheading Flight Service Station under United States Government, Department of Transportation, Federal Aviation Administration. When possible, list the primary pilot weather briefing number under the Frequently Requested Numbers section at the beginning of United States Government listings.

EXAMPLE–
United States Government
Department of Transportation
Federal Aviation Administration
Flight Service Station
(Address)
Pilot Weather Briefing [1]
Fast File Flight Plan
Facility Supervisor [2]
/1/ Parent FSS number for part–time FSSs.
/2/ Administrative number.

14–1–5. MINIMUM WEATHER EQUIPMENT

FSSs taking basic weather observations must have:

a. A ceilometer (balloons and ceiling lights are acceptable until replaced).

b. A hygrothermometer and a sling psychrometer for use in the event the hygrothermometer is inoperative.

c. A wind direction and speed system. (A gust recorder, if required, will be furnished by NWS.)

d. A standard 8–inch rain gauge (furnished by NWS if the station reports precipitation).

e. An altimeter setting indicator and a traceable pressure standard. (A barograph, if required, will be furnished by NWS.)

14–1–6. SUPPLY–SUPPORT

Equipment used exclusively for aviation observations will be procured, installed, operated, maintained, and supply–supported by FAA. Observational equipment; e.g., gust recorders, barographs, and rain gauges, serving multiple NWS/FAA purposes will be procured, installed, maintained, and supply–supported by NWS unless otherwise agreed to. To the maximum extent possible, each agency should avail itself of the facilities offered by the other in contracting for, installing, maintaining, and supply–supporting observational equipment on a nonreimbursable basis where appropriate.

14–1–7. NWS OPERATIONS MANUAL

a. Specialized Weather Services, Chapter D–20 through Chapter D–27, are distributed by Washington headquarters to all FSS facilities. When other D Chapters are required, facility managers must arrange for routine distribution through the respective Flight Services Operations Service Area Office.

b. If the listed Weather Service Operations Manuals (WSOM) and associated Operational Manual Letters (OML) are not available through FAA Distribution, those items annotated with an asterisk may be obtained from:

National Oceanic and Atmospheric Administration (NOAA) Logistics Supply Center
1510 East Bannister Road
Building 1
Kansas City, Missouri 64131

Remaining documents may be obtained by contacting the Weather Service Evaluation Officer (WSEO) servicing your area.

c. Following is a list of the available chapters. They are amended and supplemented by the issuance of either a revision or an Operations Manual Letter (OML). When ordering, specify the effected D chapter, the revision or the OML, and include the issuance number and the date. (See TBL 14–1–1.)

TBL 14–1–1
D–Chapter Listing

Chapter Title/Amendments	*Issuance Number*	*Issuance Date*
WSOMD–20 Aviation Area Forecasts*	91–3	5/3/91
OML 10–92*		
OML 11–92*		
OML 12–92*		
WSOMD–21 Aviation Terminal Forecasts	84–14	10/26/84
Rev 1	85–1	1/22/85
Rev 2	88–4	3/11/88
OML 3–85		
OML 11–86		
OML 1–91*		
OML 6–92*		
OML 5–93		
WSOMD–22 Aviation In–Flight Weather Advisories*	91–7	5/22/91
WSOMD–23 Special Aviation Forecasts and Events	79–11	8/23/79
WSOMD–24 Wind and Temperature Aloft Forecasts	81–18	11/4/81
OML 4–83	4–83	2/7/83
WSOMD–25 Support to AT Facilities	84–1	2/10/84
OML 2–84	2–84	
WSOMD–26 Aviation Weather Warnings and Pilot Briefings	85–9	8/26/85
Rev 1		
OML 13–92*	88–8	8/1/88
OML 7–92*		
OML 1–92*		
WSOMD–27 In–Flight Reports from Pilots (PIREPs)	73–1	1/23/73
WSOMD–30 Transcribed Weather Broadcast Text Products	88–3	2/5/88
WSOMD–35 International Aviation Area Forecasts	74–20	9/27/74
Rev		
OML 7–89	75–11	5/29/75
WSOMD–37 International Aviation Aerodrome Forecasts	88–6	6/1/88
OML 7–88		
WSOMD–38 International Aviation In–Flight Advisories	88–5	5/27/88
OML 3–91*		
OML 3–90		
OML 8–89		
WSOMD–79 National Weather Service Flight Operations	83–8	4/27/83
WSOMD–82 Training Program for Pilot Weather Briefers	89–8	8/17/89
Rev 1		
Rev 2*	90–10	11/27/90
OML 8–92	92–2	4/28/92

Section 2. Pilot Weather Briefing

14–2–1. BRIEFING RESPONSIBILITY

FSSs are responsible for providing weather briefings to users of aviation weather information calling in person, by radio, or telephone. These briefings are fulfilled by direct application or interpretation of NWS guidance forecasts supplemented by the latest observations and pilot reports.

14–2–2. WEATHER CHART DISPLAY

Some of the more useful weather charts for pilot weather briefings are: surface and upper air analysis, freezing level analysis, stability index analysis, radar depiction, weather depiction, surface and upper air prognosis, significant weather (high and low level) prognosis, and maximum wind and wind shear analysis and prognosis. Weather chart displays should include but not necessarily be limited to these charts.

14–2–3. TELEVISION EQUIPMENT

Closed circuit television equipment (CCTV) is available in a number of high–activity FSSs. Facilities should use the equipment to display weather graphic information. Facilities that have additional television cameras available, after graphics requirements are met, may display alphanumeric data.

14–2–4. FSS–WSO/WFO ADJOINING

When the offices are adjoining, the aviation briefing facilities should be combined to the extent practicable for efficient weather briefing service. A joint display should provide all needed aviation weather information. The briefing function will be conducted in accordance with local agreements prepared by the NWS and the FAA regions and based on interagency policy. Normally, briefings will be provided by FSS personnel. The NWS will provide support by providing and updating briefing material, consultation with the FSS briefers, and direct briefing service to the aviation user when requested by the user or the FSS specialists.

14–2–5. FSS–WSO/WFO NOT ADJOINING

At locations where joint briefing displays are not practicable, cooperative briefing service may be furnished by means of a one–call phone arrangement. This system provides for all aviation weather briefing telephone requests to be received in the FSS on lines listed under the FSS. By a switching arrangement, the pilot can be referred to the WSO/WFO when requested by the pilot.

14–2–6. FLIGHT PLANNING DISPLAY

Maintain flight planning displays in FSSs and other locations, as appropriate, convenient for pilot use. Such displays include:

a. Aeronautical charts covering the flight plan area that depict military training routes.

b. A planning chart with a means for measuring distances and plotting courses.

c. Chart Supplement U.S., NOTAM publication, and Aeronautical Information Manual.

d. Army Aviation Flight Information Bulletin.

e. DOD IFR En Route Supplement and DOD VFR Supplement.

REFERENCE–
Para 14–2–8, Military Training Activity.

f. Drawing of the local airport.

g. Sunrise and sunset tables.

h. Aero computer.

i. Pilot chart working area.

14–2–7. FLIGHT PLANNING FORMS

FSS facility managers must assure FAA Form 7233–1, Flight Plans, are available in the pilot briefing area for use by pilots. Maintain a sufficient supply to provide additional copies, as needed, to pilots, aviation companies, and organizations on request.

14–2–8. MILITARY TRAINING ACTIVITY

Ensure that the current DOD General Planning (GP), DOD Flight Information Publication (FLIP), Special

Use Airspace (AP/1A), Military Training Route (AP/1B), and associated charts are readily available for preflight briefings to pilots:

a. Post the DOD FLIP chart, or that portion covering at least the flight plan area plus a 100 NM extension of the FSSs existing flight plan area.

b. Publicize new or revised MTRs and MOAs through letters to airmen, pilot meetings, and where practicable, "handouts" charting the routes/areas within the FSS flight plan area and the 100 NM extension of the existing flight plan area.

14–2–9. TRANSFER OF BRIEFERS

a. A pilot weather briefer transferring from one briefing assignment to another or returning to a pilot weather briefing position after a break of 3 months to 1 year in the performance of briefing duties is required to obtain a reorientation check before performing pilot weather briefing duties.

b. A pilot weather briefer returning to briefing duties after an absence of more than 1 year from briefing duties is required to be requalified by means of an oral examination by the NWS.

c. FSS personnel who are selected as Academy Instructors. (See para 14–1–2, Certificates of Authority.)

Section 2. Aircraft Contacted

16–2–1. AIRCRAFT CONTACTED

a. Maintain data on the following categories of aircraft operations:

1. Air Carrier: Operations by aircraft identified in Appendix 3 which use three–letter company designators.

2. Air Taxi: Operations by aircraft other than those identified in Appendix 3 which use three–letter company designators or the prefix "TANGO."

NOTE–
Air Taxi operators who do not have a FAA issued designator have been authorized to use the prefix "TANGO."

3. Military: All classes of military operations.

4. General Aviation: Civil operations which are not classified under "air carrier" or "air taxi."

b. One count must be taken for each flight contacted regardless of the number of contacts made with the aircraft during the same flight.

c. IFSSs must count aircraft contacted times two. IFSSs combined with other options must take the aircraft contacted times two only on the international portion of their operations.

NOTE–
For aircraft contacted purposes, a flight is considered to be in progress from the time taxiing is begun until it has landed and parked.

d. One aircraft contacted count must be taken when relaying IFR departure clearances or ATC instructions via telephone, "data communication circuits," or interphone. Subsequent radio communications must not be the basis for an additional aircraft contacted count.

16–2–2. LOCAL AIRPORT ADVISORY (LAA)/REMOTE AIRPORT ADVISORY (RAA)/REMOTE AIRPORT INFORMATION SERVICE (RAIS)

In addition to the aircraft contacted count, airport advisory/remote advisory/remote information activity must be determined as follows:

a. One airport advisory/remote advisory/remote information service count must be taken for each separate inbound or outbound aircraft operation if the pilot acknowledges receiving the information.

b. Touch–and–go operations are considered to consist of a separate inbound and outbound phase. One count must be taken during the inbound phase, and an additional count must be taken for the outbound phase if LAA/RAA/RAIS is performed during each phase.

c. Although aircraft making practice instrument approaches do not normally land, they should be counted under the same criteria as touch–and–go operations.

16–2–3. RADIO CONTACTS

Count radio contacts in addition to numbers of aircraft contacted. A radio contact includes the initial radio call–up, a complete interchange of information, and a termination of the contact. A radio contact count must not be taken for a contact which is included in the LAA/RAA/RAIS count.

Section 5. Other Reports and Information

16–5–1. COMPLETION OF MONTHLY ACTIVITY RECORD

a. This form is to be completed by all FSSs. All computerized, or automated versions of FAA Form 7230–13 must be pre–approved by the Office of Aviation Policy and Plans, Planning Analysis Division, Statistics and Forecast Branch, APO–110, prior to use.

b. Enter daily totals for each applicable category on the daily activity record. Leave sections that do not apply to an individual facility blank. Any time there is an equipment failure, and actual figures are unavailable, provide estimated figures where appropriate. Annotate such estimates in the "Reserved" column on side 2 of the form.

c. To facilitate automatic data processing, complete the header and the monthly total rows on both sides of the form. Follow the instructions below to complete the form:

1. Facility Name: Enter the facility name as specified in FAAO JO 7350.8, Location Identifiers.

2. Location: Enter city and state.

3. Communications Equipment: Check as appropriate.

4. Facility Type: Check as appropriate.

5. Month: Enter the month using two digits (e.g., 01 – for month of January).

6. Year: Enter the year using the last two numerals of the calendar year (CY).

7. Location Identifiers: Enter the three–letter identifier specified in FAAO JO 7350.8.

8. Aircraft Contacted: Enter the number of aircraft contacted in accordance with para 16–2–1, Aircraft Contacted.

9. Flight Plans Originated: Enter the number of flight plans in accordance with para 16–3–1, Flight Plan Count.

10. Pilots Briefs: Enter the number of pilot briefings in accordance with para 16–4–1, Pilot Briefing Count.

11. TIBS Calls Received: Enter the total number of calls to the TIBS.

12. NOTAMs issued: Enter the total number of NOTAMs issued. Count all NOTAM D, and NOTAM L. Do not count NOTAM cancellations.

13. Calls to Briefers: Calls to Briefers and TIBS Calls Received are separate categories and are not to be combined. Do not use decimals. Indicate the number of call as follows:

(a) Litton facilities enter the number of "calls offered" from the Gate 1 Report.

(b) Denro facilities enter the number of calls received ("#RCVD") from the Automatic Call Director (ACD) Call History –– Briefer Calls.

14. Calls Lost: All calls lost after zero (0) seconds delay must be counted.

(a) Litton facilities enter the "average speed answered" in whole seconds for calls to briefers from the Gate 1 Report.

(b) Denro facilities enter the average delay ("AVDLY") History––Briefer Calls.

15. Airport Advisories: Enter the number of airport advisories in accordance with para 16–2–2, Local Airport Advisory (LAA)/Remote Airport Advisory (RAA)/Remote Airport Information Service (RAIS).

16. Radio Contacts: Enter the number of radio contacts in accordance with Paragraph 16–2–3, Radio Contacts.

16–5–2. DISTRIBUTION AND AMENDMENT

a. Distribute FAA Form 7230–13 (FSS Activity) as follows:

1. Forward the original form to the Flight Services Operations Area Office not later than the 2nd workday (Monday–Friday) of the following month.

2. Retain a copy of the form in the facility's files.

b. Correct any errors in the forms sent in prior months by completing a new form, circling the revised fields, and marking the form "AMENDED

COPY." Amended copies of the forms more than one month old will not be accepted unless approval has been obtained from the Statistics and Forecast Branch, APO−110, by the Flight Services Operations Area Office. Send amended copies, along with the current reporting month's forms, to the Flight Services Operations Area Office.

16−5−3. MESSAGE TRAFFIC NUMBER RECORD

Use FAA Form 7233−6 or local substitute to record message traffic.

16−5−4. UNANNOUNCED MILITARY AIRCRAFT ARRIVALS

The destination and departure tie−in stations must record on or attach to unannounced arrival messages all available related information and must coordinate with the local military bases for corrective action when necessary. These messages must be filed with the military daily traffic and unless a part of an incident, alleged violation, or accident, be retained for 15 days before disposal.

Section 6. FSS Lists, Logs, and Tallies (OASIS)

16–6–1. RECORDING OF FLIGHT INFORMATION

OASIS provides a means in which flight information is recorded and retained electronically for 15 days. A compact flash card reader connected to each NT server records:

a. Additions, deletions and amendments to the Proposed and Inbound Lists.

b. Additions and deletions to the Suspense and SAR (Search and Rescue) Lists.

In the event of a flight information recorder software failure, an Interface Status List alarm will be generated at designated positions (normally supervisor/CIC). If it is determined that flight information is not being recorded, facilities must ensure that the Inbound, Proposed, Suspense and SAR Lists can be printed in the event of a system failure. Any printed lists must be retained for 15 days.

NOTE–
Lists must be open before they can be printed. Open Lists can be minimized to increase work space in the Main Window.

16–6–2. MANAGEMENT OF LISTS AND LOGS

Transactions involving list updates, flight plan logs, preflight briefing logs, and inflight contact logs must be retained for 15 days by electronic means. Printing is not required.

16–6–3. TALLIES PRINTING

OASIS provides a daily Facility Local Activity Report. This report must be retrieved and printed daily and retained for 15 days. Use this report to complete FAA Form 7230–13. The following types of data are contained in the Local Activity Report:

a. Non–Briefing Contacts.

1. Domestic.

2. ICAO.

b. Pilot Weather Briefing (PWB) Tally: Preflight Domestic, Preflight ICAO, Inflight Domestic, Inflight ICAO.

1. Single Item.

2. Multi–Leg.

3. PWB.

c. Inflight Position Aircraft Contact Tally: IFR, DVFR, VFR, ICAO IFR, ICAO VFR.

1. Air Carrier.

2. Air Taxi.

3. General Aviation.

4. Military.

d. Inflight Position Radio Contact Tally: IFR, DVFR, VFR, ICAO IFR, ICAO VFR.

1. Air Carrier.

2. Air Taxi.

3. General Aviation.

4. Military.

e. Flight Plan Tally: IFR Domestic, IFR ICAO, VFR Domestic, VFR ICAO, DVFR Domestic.

1. Filed.

2. Amended.

3. Canceled.

4. Closed.

f. NOTAM Tally.

g. PIREP Tally.

Section 6. Traffic Management Initiatives

17–6–1. GENERAL

a. Traffic Management Initiatives (TMIs) are techniques used to manage demand with capacity in the NAS.

1. Properly coordinated and implemented TMIs are an important tool in the air traffic system. These initiatives contribute to the safe and orderly movement of air traffic.

2. Any TMI creates an impact on customers. It is imperative to consider this impact and implement only those initiatives necessary to maintain system integrity.

b. Dynamic TMIs are those imposed on an as needed basis to manage fluctuations in traffic demands.

17–6–2. BACKGROUND

Some TMIs may also be considered "control instructions" or procedures; the difference is determined by the magnitude of the event, the coordination process, and the length of time it is implemented. TMIs may also be referred to as "restrictions," especially in conjunction with miles–in–trail.

17–6–3. POLICY

To maintain the integrity of the air traffic system, facility TM personnel must employ the least restrictive methods available to minimize delays.

17–6–4. TYPES OF TMIs

a. Altitude.

1. Utilized to segregate different flows of traffic, or to distribute the number of aircraft requesting access to a specified geographic region.

2. Colloquialisms:

(a) Tunneling– Term to indicate traffic will be descended prior to the normal descent point at the arrival airport to remain clear of an airspace situation; e.g., holding.

(b) Capping– Term to indicate aircraft will be cleared to an altitude lower than their requested altitude until they are clear of a particular airspace. Capping may apply to the initial segment of the flight or for the entire flight.

3. Low Altitude Arrival/Departure Routing (LAADR). A set of routings with altitude expectations for usage in times of severe weather constraints on the system. LAADR may apply to the departure or the arrival phase of flight. LAADR requires a written agreement with the customers prior to implementing.

b. Miles–in–trail (MIT). The number of miles required between aircraft that meet a specific criteria. The criteria may be separation, airport, fix, altitude, sector, or route specific. MIT are used to apportion traffic into manageable flows, as well as, provide space for additional traffic (merging or departing) to enter the flow of traffic.

c. Minutes–in–trail (MINIT). The number of minutes required between successive aircraft. It is normally used in a non–radar environment, or when transitioning to a non–radar environment, or additional spacing is required due to aircraft deviating around weather.

d. Fix balancing. Assigning an aircraft a fix other than in the filed flight plan in the arrival or departure phase of flight to equitably distribute demand.

e. Airborne holding. Planned holding of aircraft may be utilized. This is normally done when the operating environment supports holding and the weather conditions are expected to improve shortly; this ensures aircraft are available to fill the capacity at the airport.

f. Sequencing Programs. These programs are designed to achieve a specified interval between aircraft; they may be software generated or determined by TM personnel. Different types of programs accommodate different phases of flight.

1. Departure Sequencing Program (DSP)– Assigns a departure time to achieve a constant flow of traffic over a common point. Normally, this involves departures from multiple airports.

2. En route Sequencing Program (ESP)– Assigns a departure time that will facilitate integration in the en route stream.

3. Arrival Sequencing Program (ASP)– Assigns fix crossing times to aircraft destined to the same airport.

4. Time-Based Metering (TBM). The action of personnel providing air traffic services to meet a scheduled time at which airborne aircraft should cross a metering point or arc.

g. Reroutes:

1. Reroutes are ATC routings other than the filed flight plan. They are issued to:

(a) Ensure aircraft operate with the "flow" of traffic.

(b) Remain clear of special use airspace.

(c) Avoid congested airspace.

(d) Avoid areas of known weather or where aircraft are deviating or refusing to fly.

2. Operators should file new flight plans when they are more than 45 minutes from departure.

3. Sources for route information:

(a) Chart Supplement U.S.

(b) Preferential Route Information in facilities.

(c) Route Management Tool.

(d) North American Route Notice.

(e) Federal Air Regulations.

(f) Notices to Airmen.

(g) Advisories issued by ATCSCC. (These are listed on the Operational Information System.)

4. More information on routes is contained in Section 17, Coded Departure Routes, Section 18, Route Advisories, and Section 20, National Playbook.

h. Ground Delay Programs. (See Section 9, Ground Delay Programs.)

i. Airspace Flow Programs. (See Section 10, Airspace Flow Programs (AFP).)

j. Ground Stops. (See Section 11, Ground Stop(s).)

17–6–5. EXCEPTION

The above list is not all–inclusive and does not preclude the innovation and application of other procedures that will result in improved customer service.

17–6–6. TMI DATA

The efficiency of the NAS is enhanced when all participants have access to the same data. Utilization of shared technology, (e.g., Flow Evaluation Area) enhances the coordination process.

17–6–7. TMI APPROVAL AUTHORITY

a. The ATCSCC is the approval authority for all en route and designated terminals inter–facility TMIs, except as identified in subparagraph (b) below and MIT restrictions of ten (10) miles or less. TMIs that are expected to result in reportable delays must be coordinated through the ATCSCC. Reportable delays are delays of 15–minutes or more as defined in FAA Order JO 7210.55, Operational Data Reporting Requirements.

NOTE–
New York TRACON is a designated terminal and others may be included at the direction of System Operations.

b. The Center/TRACON is responsible for TMI within their area of jurisdiction (underlying terminals) that do not cause reportable delays.

17–6–8. PROCESSING TMI

a. The initiating facility must identify the need for a TMI, explore alternatives, and prepare a justification.

b. The initiating facility must be prepared to discuss the proposal at the request of the ATCSCC and/or the receiving facility prior to implementation during the joint review process.

c. Facilities must continuously monitor and evaluate the TMI, and make adjustments as necessary, including cancellation.

d. Facilities must conduct post event analysis on the TMI, and document any known negative impacts/feedback.

17–6–9. FIELD FACILITY RESPONSIBILITIES FOR TMIs

a. Evaluate capacity and demand. The assessment must include the evaluation of all data required to

1. Designated user representatives.

2. Designated organization or association representatives when users are members.

3. FAA/user meetings.

4. The ATCSCC for user organizations at the national level.

c. Interfacility coordination:

1. The originating ARTCC must be 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 change or delete a preferred IFR route.

(c) When establishment, change, or deletion of a preferred route is proposed by a facility other than an ARTCC, the requesting facility must coordinate with the parent ARTCC. The parent ARTCC must assume responsibility as the originator.

2. The originating ARTCC must:

(a) Coordinate with all affected ATC facilities and users at the local level.

(b) Forward the completed data to the En Route and Oceanic Operations Service Area office and Terminal Operations Service Area office.

3. Each Service Area office must:

(a) Resolve differences between its ATC facilities.

(b) Coordinate with the users at the Service Area office level.

(c) Forward the completed data to the ATCSCC.

d. The originating Service Area office must forward unresolvable controversial proposals, with all comments and objections, to ATCSCC for resolution. Proposals which are approved will be sent for processing. Disapprovals will be returned to the Service Area office originating the proposal.

1. The ATCSCC must:

(a) Complete coordination with the users at the national level.

(b) After the 30 day coordination forward completed preferred IFR routes to System Operations Airspace and Aeronautical Information Management for publication.

17–16–5. PROCESSING AND PUBLICATION

a. The airspace information cutoff dates listed in the AFD are the last date that preferred routes may be received by the NFDC to assure publication on the planned effective date. The following procedures must apply:

1. Plan “effective” dates to coincide with the issue date of the AFD.

2. Send approved preferred routes to the ATCSCC at least 15 weeks prior to the desired effective date. Include the desired effective date. Effective dates must coincide with the 56–day charting cycle due to airway changes affecting preferred routes.

3. ATCSCC must forward approved preferred routes to arrive at the NFDC at least 9 weeks prior to the desired effective date.

NOTE–
The importance of adequate lead time cannot be overemphasized. Experience has shown that early submission for publication reduces errors, workload, and printing costs. In the case of major or lengthy changes, additional lead time may be necessary. Facilities should coordinate with the ATCSCC to determine if the requested effective date can be met.

b. Preferred routes must be submitted to the NFDC on standard 8.5 by 11 (inches) white bond paper, camera ready, to be included in the NFDD. To facilitate editing and processing, it is recommended that the preferred route text be submitted as an electronic mail attachment. The specific format for preferred routes is noted in examples 1, 2, and 3 below. For those submissions not covered by example, the originator should contact NFDC for guidance.

c. The following three examples show the formats for the submission of preferred IFR route data. The first shows the addition of new routes, the second shows the modification of existing routes, and the third shows the deletion of existing routes. Compliance is mandatory to eliminate the possibility of error in publication.

EXAMPLE–

1. *Adding new routes, use this format:*

SPECIAL USE AIRSPACE LOW ALTITUDE PREFERRED ROUTES (or other applicable section)	
NORTHEAST U.S.	EFFECTIVE HOURS
(applicable Chart Supplement U.S.)	UTC
Effective April 28, 1994, the following routes are added:	
BALTIMORE TO NORFOLK	
NEW: (70–170 INCL., NON–JET)	1100–0300
V93 PXT V16 V33 V286 STEIN	
OR	
(70–170), JETS) DAILY	1100–0300
V33 V286 STEIN	
BALTIMORE TO ROCHESTER	
NEW: V31 ROC154 CHESY	1100–0300

2. *Deleting existing routes, use this format:*

SPECIAL USE AIRSPACE LOW ALTITUDE PREFERRED ROUTES (or other applicable section)	
NORTHEAST U.S.	EFFECTIVE HOURS
(applicable Chart Supplement U.S.)	UTC
Effective April 28, 1994, the following routes are deleted:	
BALTIMORE TO NORFOLK	
BALTIMORE TO ROCHESTER	

NOTE–

Multiple routes are considered a set and the entire set must be deleted to be shown as in this example. If only one route of the set is deleted, use the modified format in example 3.

3. *Modifying existing routes, use this format:*

SPECIAL USE AIRSPACE LOW ALTITUDE PREFERRED ROUTES (or other applicable section)	
NORTHEAST U.S.	EFFECTIVE HOURS
(applicable Chart Supplement U.S.)	UTC
Effective April 28, 1994, the following routes are modified:	
BALTIMORE TO NORFOLK	
OLD: (70–170 INCL., NON–JET)	1100–0300
V87 PXT V6 V73 V286 STEIN	
OR	
(70–170), JETS) DAILY	1100–0300
V33 V286 STEIN	
BALTIMORE TO ROCHESTER	
V81 ROC154 CHESY	1100–0300
Note – Notice that in the routes from Baltimore to Norfolk, there are two available routes and that only the first route changed. The two routes are considered a set and the entire set must be submitted, even if only one route is being changed.	

Section 25. Time–Based Flow Management (TBFM)

17–25–1. GENERAL

a. TBFM is the hardware, software, methods, processes, and initiatives to manage air traffic flows based on time to balance air traffic demand with system capacity, and support the management of Performance Based Navigation (PBN).

b. TBFM provides a dynamic timed based environment, which increases efficiency and minimizes delays, compared to the use of static miles-in-trail. TBFM is a comprehensive, automated method of departure scheduling, en route adjustments, and arrival management. TBFM increases situational awareness through its graphical displays, timelines, and load graphs. TBFM trajectories are optimized for each aircraft to permit an accurate estimated time of arrival at an airport and provide scheduled times of arrival (meter times) that optimize the flow of traffic into a terminal area by adding more predictability to the ATC system. TBFM enables the routine use of Performance Based Operations (PBO).

17–25–2. PURPOSE

a. This section establishes the purpose of TBFM.

b. TBFM is the expanded use of time based metering to enable gate-to-gate improvements in both fuel and throughput efficiencies by:

1. Applying spacing only where needed.

2. Allowing for the routine use of PBO.

3. Capitalizing on advanced aircraft Flight Management System (FMS) capabilities.

4. Adding more predictability to the ATC system.

17–25–3. POLICY

When departure and or arrival flows are subject to TMIs, or when supporting PBN procedures, TBFM must be used to the maximum extent feasible in preference to miles-in-trail initiatives. Procedures for use of the capabilities within TBFM, in support of PBN operations and TMIs, must be documented in facility directives.

NOTE–
The benefits of TBFM are best realized through the coordinated effort of all facilities supporting PBN procedures or TMIs.

17–25–4. DEFINITIONS

a. Adjacent Center Metering (ACM). An extension of Single Center Metering (SCM) that provides time-based metering capability to neighboring facilities. There are three categories of ACM processing and control at a facility:

1. Managing Facility (Full Control Graphic User Interface (GUI)) – That facility which exercises control over SCM and/or ACM settings and the relevant metering operation.

2. Limited Control (Partial Control GUI) - The ability to manage specific ACM settings and activities for relevant metering operations.

3. Non-Controlling (Non-Control GUI) - A facility that only has monitoring capability.

b. Constraint Satisfaction Point (CSP) – A meter arc, meter fix, meter point or other meter reference elements.

c. *Coupled Scheduling*. Adds additional CSPs for an aircraft to meet the scheduled time of arrival along their route. This results in more optimal balancing and distribution of delays over a greater distance from the airport or CSP.

d. *En Route Departure Capability (EDC)*. Scheduling capability that assists personnel providing traffic management services in formulating release times to a CSP to manage a mile-in-trail restrictions.

e. Extended Metering. Adds additional CSPs for an aircraft to meet the scheduled time of arrival along their route. This results in more optimal balancing and distribution of delays over a greater distance from the airport or CSP.

f. Ground-Interval Management-Spacing (GIM-S). Capability that provides automated speed advisories prior to descent to enable en route controllers to meet the Scheduled Time of Arrival (STA).

g. Integrated Departure/Arrival Capability (IDAC). Capability that automates the Call for Release process for departure scheduling and EDC.

h. Reschedule/Global Reschedule – The recalculation of generated frozen scheduled times of arrival (STA) resulting from an action taken at the TBFM GUI. Reschedule/Global Reschedule also commonly referred to as "rescheduling" or "rippling," can be executed as an independent function but is also accomplished when changes to TBFM configurations or settings occur.

i. Single Center Metering (SCM). Capability that provides personnel providing traffic management services with the ability to view and manage arrival flows to an ARTCC's internal airports.

j. Supporting Facility. A facility, which maintains an ancillary relationship to the managing facility in supporting TBFM-related functions.

k. Time Based Flow Management (TBFM) is the hardware, software, methods, processes, and initiatives to manage air traffic flows based on time to balance air traffic demand with system capacity, and support the management of PBN. This includes, but not limited to, TBM, ACM, SCM, EDC, TBS, IDAC, GIM-S, and Extended/Coupled Metering.

l. Time-Based Metering (TBM). The action of personnel providing air traffic services to meet a scheduled time at which airborne aircraft should cross a CSP.

m. Time-Based Scheduling (TBS)/Departure Scheduling. The action of personnel providing traffic management services to formulate time parameters for release of aircraft into an arrival flow.

17–25–5. RESPONSIBILITIES

a. The ATCSCC must:

1. Be the final decision authority for TBFM-related operations and initiatives.

2. Manage the equity of overall system delays throughout the NAS.

3. Maintain awareness of all TBFM-related operational activities within the NAS.

4. Include the status of pertinent TBFM related information on the planning telecons and on the National Airspace System Status display.

5. Prioritize day-to-day TBFM activity based on NAS and/or facility constraints.

6. Establish and maintain multi-facility communications when necessary for TBFM operations.

7. Log TBFM related activities.

b. The Managing Facility must:

1. Determine appropriate TBFM settings and parameters.

2. Ensure TBFM settings are entered via TBFM TGUI, kept current, and coordination is accomplished.

3. Determine TBFM activity timeframes and coordinate start/stop times with the ATCSCC and affected facilities.

4. Communicate TBFM activity start/stop information to operational areas, operating positions, and supporting facilities, and log.

5. Enable/Disable sector meter list as coordinated, where applicable.

6. Monitor internal internal and upstream compliance and take appropriate action.

7. Monitor TBFM airborne delays and initiate actions, as appropriate, when values exceed or are projected to exceed delays that can be absorbed by control sectors. Notify the FLM or affected areas/sectors of actions taken and expected outcomes.

8. Notify ATCSCC when unable to use TBFM capabilities, provide supporting justification, and log.

9. Coordinate internally with affected areas and with supporting facilities before taking action when changes to the metering strategy or updates to the TBFM schedule are necessary.

NOTE–
To the extent possible, avoid making any changes in TBFM that cause a reschedule/global reschedule during metering operations. Coordinate with affected facilities and sectors before a reschedule/global reschedule.

10. Ensure TBFM coordination procedures are placed into local SOP or LOAs between facilities.

REFERENCE–
FAAO 7210.3, 4-3-1, LETTERS OF AGREEMENT

11. Use TBFM to determine release times for facility controlled departures to a metered airport.

12. Ensure TBFM adaptations are maintained to reflect current operations.

13. Ensure trouble reports are submitted and reconciled.

14. Ensure TBFM training is completed.

15. Provide support to other local facilities with TBFM equipment.

16. Supporting facilities (ARTCC/TRACON/Tower) must:

c. Supporting facilities (ARTCC/TRACON/Tower) must:

1. Determine appropriate local TBFM settings.

2. Ensure TBFM settings are entered via TBFM TGUI, kept current, and coordination is accomplished.

3. Determine TBFM activity timeframes and coordinate start/stop times with the ATCSCC and affected facilities.

4. Communicate TBFM activity start/stop information to operational areas, operating positions, and supporting facilities, and log.

5. Enable/Disable sector meter list as coordinated, where applicable.

6. Use TBFM to determine release times for facility controlled departures to a metered airport.

7. Monitor arrival and departure flows for potential metering actions/changes.

8. Notify managing facility when unable to use TBFM capabilities, provide supporting justification, and log.

9. Monitor internal and upstream compliance and take appropriate action.

10. Ensure TBFM training is completed.

11. Through the appropriate managing facility, supporting facilities must:

(a) Ensure adaptations are maintained to reflect current operations

(b) Ensure trouble reports are submitted and reconciled

(c) Provide support to other local facilities with TBFM equipment

18–1–8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE

The applicant must be advised in writing of the waiver or authorization approval or denial, and, if appropriate, what is required to obtain reconsideration.

a. Applicant: The original waiver, authorization or denial, and a copy of the application must be forwarded to the applicant.

b. Issuing Office: The original of the application and a copy of the waiver, authorization or denial must be retained by the issuing office.

c. Washington Headquarters: Except for waivers or authorizations issued by Flight Standards Service, forward copies of waivers, authorizations or written denials to the Washington Headquarters, Airspace Policy and Regulations Group.

d. Other Distribution: Other than as specified above and as necessary to satisfy Service Area office needs, distribution must be limited to those offices that have a need for the information. For parasail operations covered under Paragraph 18-5-1, Service Area offices must distribute approved waivers or authorizations to the appropriate Flight Standards District Office.

18–1–9. CANCELLATION OF WAIVERS AND AUTHORIZATIONS

A waiver or authorization may be canceled at any time by the Administrator, the person authorized to grant the waiver or authorization, or the representative designated to monitor a specific operation. As a general rule, a waiver or authorization should be canceled when it is no longer required or there is an abuse of its provisions or unforeseen safety factors develop. Failure to comply with the waiver or authorization is cause for cancellation. Cancellation procedures, as applicable, must be used as follows:

a. Notify the holder immediately.

b. Verify and document the basis for the cancellation.

c. Notify the appropriate Service Area office, as well as the issuing office.

d. Provide the holder with written notice of cancellation, or written confirmation of a verbal cancellation, with copies to appropriate offices.

e. Take any other action deemed necessary.

FIG 18–1–1

FAA Form 7711–1

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

CERTIFICATE OF WAIVER OR AUTHORIZATION

ISSUED TO

(self-explanatory)

ADDRESS

(self-explanatory)

This certificate is issued for the operations specifically described hereinafter. No person shall conduct any operation pursuant to the authority of this certificate except in accordance with the standard and special provisions contained in this certificate, and such other requirements of the Federal Aviation Regulations not specifically waived by this certificate.

OPERATIONS AUTHORIZED

(Indicate in detail all operations authorized. Use a separate sheet of paper if necessary.)

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

(This section not used for Unmanned Air Vehicle authorizations.)

STANDARD PROVISIONS

1. A copy of the application made for this certificate shall be attached to and become a part hereof.
2. This certificate shall be presented for inspection upon the request of any authorized representative of the Administrator of the Federal Aviation Administration, or of any State or municipal official charged with the duty of enforcing local laws or regulations.
3. The holder of this certificate shall be responsible for the strict observance of the terms and provisions contained herein.
4. This certificate is nontransferable.

Note: - This certificate constitutes a waiver of those Federal rules or regulations specifically referred to above. It does not constitute a waiver of any State law or local ordinance.

SPECIAL PROVISIONS

Special Provisions Nos. 1 to 4, inclusive, are set forth on the reverse side hereof.

This certificate is effective from *(Beginning date/time)* to *(Ending date/time)*, inclusive, and is subject to cancellation at any time upon notice by the Administrator or his authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

(self-explanatory)

(Region)

(Signed by Appropriate Waiver Authority)

(Signature)

(Enter date the waiver was signed)

(Date)

(self-explanatory)

(Title)

FAA Form 7711-1 (7-74) ***1975 - G.P.O. - 1703-M/674-862/199**

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

18–5–1. MOORED BALLOONS, KITES, PARASAIL, UNMANNED ROCKETS, AND UNMANNED FREE BALLOONS/OBJECTS

Apply the following guidelines to moored balloon, kite, parasail, unmanned rocket, or unmanned free balloon flights conducted in accordance with Part 101 of 14 CFR:

a. Facilities receiving moored balloon, kite, unmanned rocket, or unmanned free balloon information must ensure that appropriate notices include the information required by 14 CFR Sections 101.15, 101.37, and 101.39.

b. Facilities receiving parasail information must ensure that appropriate notices include the information required by 14 CFR Section 101.15.

c. Notice information must be forwarded to affected air traffic facility/s. Also, air traffic facilities must forward notices received to the appropriate FSS for dissemination as a NOTAM.

d. Handle unmanned free balloon operations below 2,000 feet above the surface in Class B, Class C, Class D or Class E airspace areas requiring ATC authorization as follows:

1. Authorize the request if the operation is not expected to impact the normally expected movement of traffic.

2. Coordinate with other affected facilities before authorizing the flight.

e. Request the operator of unmanned free balloon flights to forward position reports at any time they are needed to assist in flight following.

NOTE–
Operators are required only to notify the nearest FAA ATC facility if a balloon position report is not recorded for 2 hours. Other position reports are forwarded only as requested by ATC.

18–5–2. DERELICT BALLOONS/OBJECTS

Take the following actions when a moored balloon/object is reported to have escaped from its moorings and may pose a hazard to air navigation, the operator of an unmanned free balloon advises that a position report has not been recorded for a 2–hour period, or the balloon's/object's flight cannot be terminated as planned:

a. Determine from the operator the last known and the present estimated position of the balloon/object as well as the time duration that the balloon/object is estimated to stay aloft. Also obtain other information from the operator such as the operator's access to a chase plane, hazardous material onboard, balloon/object coloring, special lighting, etc.

b. Attempt to locate and flight follow the derelict balloon/object.

c. Determine if the balloon's/object's flight can be terminated by the operator. If the balloon's/object's flight can be terminated, inform the operator of any known air traffic that might be a factor.

d. If the balloon's/object's flight cannot be terminated:

1. Advise the operator that the balloon/object is declared to be a derelict and as such is a potential hazard to air navigation.

2. Notify the ATCSCC, the regional Operations Center, and all affected facilities of the derelict. The ATCSCC will serve as the focal point for the collection and dissemination of further information.

3. Provide the ATCSCC with revised position or altitude information.

4. If required, assistance in locating and tracking the balloon may be requested from the National Military Command Center (NMCC), NORAD, or other agencies with surveillance capabilities through the ATCSCC. If appropriate, the ATCSCC will advise the NMCC that the derelict balloon is a current or potential hazard to air traffic. If the balloon cannot be located or flight followed, it poses at least a potential hazard.

NOTE–
The final decision to destroy the derelict balloon is the responsibility of the appropriate NORAD Commander.

e. Record and handle the derelict balloon as a Miscellaneous Incident.

REFERENCE–
FAAO JO 7110.65, Para 9–6–2, Derelict Balloons.

Chapter 19. Temporary Flight Restrictions

Section 1. General Information

19–1–1. PURPOSE

This section prescribes guidelines and procedures regarding the use and issuance of regulatory temporary flight restrictions (TFRs).

19–1–2. AUTHORITY

a. The FAA Administrator has sole and exclusive authority over the navigable airspace of the United States. The Administrator has broad authority under Section 40103 of Title 49 of the United States Code (U.S.C.) to regulate, control, and develop plans for the use of the navigable airspace and to formulate policy for navigable airspace. See also 49 U.S.C. Section 40101(d).

b. Title 14 of the Code of Federal Regulations (14 CFR) parts 91 and 99 contain regulations addressing temporary flight restrictions and Special Security Instructions.

19–1–3. REASONS FOR ISSUING A TFR

While not all inclusive, a TFR may be issued for the following reasons: toxic gas leaks or spills; fumes from flammable agents which, if fanned by rotor or propeller wash, could endanger persons or property on the surface or in other aircraft; volcanic eruptions that could endanger airborne aircraft and occupants; hijacking incidents that may endanger persons or property on the surface, or airborne aircraft and occupants; aircraft accident/incident sites; aviation or ground resources engaged in wildfire suppression; aircraft relief activities following a disaster; aerial demonstrations or major sporting events. A Special Security Instruction may be issued for reasons of national security.

19–1–4. TYPES OF TFRs

TFRs may be issued under the following regulations:

a. Section 91.137, Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas.

b. Section 91.138, Temporary Flight Restrictions in National Disaster Areas in the State of Hawaii.

c. Section 91.139, Emergency Air Traffic Rules.

d. Section 91.141, Flight Restrictions in the Proximity of the Presidential and Other Parties.

e. Section 91.143, Flight Limitation in the Proximity of Space Flight Operations.

f. Section 91.145, Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events.

g. Section 99.7, Special Security Instructions.

19–1–5. TFR NOTAM CONTENT

TFR NOTAMs must comply with procedures detailed in FAA Order JO 7930.2, Notices to Airmen (NOTAM).

19–1–6. TFR INFORMATION

a. Educational information regarding TFRs can be found in 14 CFR parts 91 and 99, and the Aeronautical Information Manual.

b. National Airspace System (NAS) users or other interested parties should contact the nearest flight service station for TFR information. Additionally, you can find TFR information on automated briefings, Notice to Airmen (NOTAM) publications, and on the Internet at *http://www.faa.gov*. The FAA also distributes TFR information to aviation user groups and requests these groups to further disseminate the information to their members.

19–1–7. TFRs OUTSIDE OF THE UNITED STATES AND ITS TERRITORIES

TFRs are only implemented for sovereign U.S. airspace and its territories. If restrictions are located in an area that extends beyond the 12–mile coastal limit or a U.S border, the NOTAM will contain language limiting the restriction to the airspace of the U.S., and its territories and possessions. The FAA may issue an advisory via the NOTAM System to inform affected users of any hazard or dangerous information outside of the sovereign U.S. airspace and its territories.

19–1–8. TFR QUESTIONS

Direct any questions or concerns regarding TFRs to the ATO service area director having jurisdiction over the TFR area. You may also contact Mission Support, Airspace, Regulations, and ATC Procedures Group, FAA Headquarters, Washington, D.C., at (202) 267–8783.

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

19–2–1. PURPOSE

This section prescribes guidelines and procedures regarding the management of aircraft operations in the vicinity of disaster/hazard areas in accordance with 14 CFR Section 91.137. TFRs issued under this section are for disaster/hazard situations that warrant regulatory measures to restrict flight operations for a specified amount of airspace, on a temporary basis, in order to provide protection of persons or property in the air or on the ground.

19–2–2. RATIONALE

TFRs in accordance with 14 CFR Section 91.137 are issued when necessary to:

a. 14 CFR 91.137(a)(1) – Protect persons and property on the surface or in the air from an existing or imminent hazard associated with an incident on the surface when the presence of low flying aircraft would magnify, alter, spread, or compound that hazard.

b. 14 CFR 91.137(a)(2) – Provide a safe environment for the operation of disaster relief aircraft.

c. 14 CFR 91.137(a)(3) – Prevent an unsafe congestion of sightseeing and other aircraft above an incident or event that may generate a high degree of public interest.

NOTE–
This provision applies only to disaster/hazard incidents of limited duration that would attract an unsafe congestion of sightseeing aircraft.

19–2–3. SITUATIONS FOR RESTRICTIONS

TFRs in accordance with 14 CFR Section 91.137 may be issued for, but are not limited to, the following situations:

a. 14 CFR 91.137(a)(1): toxic gas leaks or spills; flammable agents or fumes that, if fanned by rotor or propeller wash, could endanger persons or property on the surface or, if entered by an aircraft, could endanger persons or property in the air; volcanic eruptions that could endanger airborne aircraft and occupants; nuclear accident or incident; and hijackings.

b. 14 CFR 91.137(a)(2): aviation or ground resources engaged in wildfire suppression; and aircraft relief activities following a disaster (for example, earthquake, tidal wave, flood, etc.).

c. 14 CFR 91.137(a)(3): disaster/hazard incidents of limited duration that would attract an unsafe congestion of sightseeing aircraft, such as aircraft accident sites.

19–2–4. REQUESTING AUTHORITIES

A TFR under 14 CFR Section 91.137 may be requested by various entities, including military commands; regional directors of the Office of Emergency Planning; Civil Defense State Directors; civil authorities directing or coordinating air operations associated with disaster relief; civil authorities directing or coordinating organized relief air operations (including representatives of the Office of Emergency Planning, U.S. Forest Service, and state aeronautical agencies); and law enforcement agencies.

19–2–5. ISSUING TFRs

a. FAA Headquarters or the ATO service area director (or their designee) having jurisdiction over the area concerned may issue a TFR.

b. TFRs issued for hijacking events may be issued by FAA Headquarters or the ATO service area director (or designee) with coordination through the Domestic Events Network (DEN) air traffic security coordinator (ATSC).

c. ARTCC managers (or designee) may issue TFRs in accordance with 14 CFR Sections 91.137(a)(1) and (a)(2).

d. TFRs issued in accordance with 14 CFR Section 91.137(a)(3) require FAA Headquarters approval.

e. TFRs issued for law enforcement activities require approval from the ATO Director of System Operations Security (or designee).

NOTE–
Law enforcement activities that may warrant TFRs include, but are not limited to, situations where there is a direct hazard to aircraft (for example, shots fired at aircraft) or where the presence of aircraft could exacerbate the danger to personnel on the ground (for example, SWAT or other personnel moving into position, etc.).

19–2–6. DEGREE OF RESTRICTIONS

a. Section 91.137(a)(1). Restrictions issued in accordance with this section prohibit all aircraft from operating in the designated area unless that aircraft is participating in the disaster/hazard relief activities and is being operated under the direction of the official in charge of on–scene emergency response activities.

b. Section 91.137(a)(2). Restrictions issued in accordance with this section prohibit all aircraft from operating in the designated area unless at least one of the following conditions is met:

1. The aircraft is participating in hazard relief activities and is being operated under the direction of the official in charge of on–scene emergency response activities.

2. The aircraft is carrying law enforcement officials.

3. The aircraft is operating under an ATC approved IFR flight plan.

4. The operation is conducted directly to or from an airport within the area, or is necessitated by the impracticability of VFR flight above or around the area due to weather or terrain. Notification must be given to the ATC facility or office that was specified in the NOTAM for coordination with the official in charge of on–scene emergency response activities. Also, the operation does not hamper or endanger relief activities and is not conducted for observing the disaster.

5. The aircraft is carrying properly accredited news representatives, and prior to entering the area, a flight plan is filed.

NOTE–
Coordination with the official in charge of on–scene emergency response activities is required prior to ATC allowing any IFR or VFR aircraft to enter into the TFR area.

c. Section 91.137(a)(3). Restrictions issued in accordance with this section prohibit all aircraft from operating in the designated area unless at least one of the following conditions is met:

1. The operation is conducted directly to or from an airport within the area, or is necessitated by the impracticability of VFR flight above or around the area due to weather or terrain, and the operation is not conducted for the purpose of observing the incident or event. Notification must be given to the ATC facility that was specified in the NOTAM for coordination with the official in charge of the activity.

2. The aircraft is operating under an ATC approved IFR flight plan.

3. The aircraft is carrying incident or event personnel, or law enforcement officials.

4. The aircraft is carrying properly accredited news representatives and, prior to entering that area, a flight plan is filed with FSS or the ATC facility specified in the NOTAM. Flight plans must include aircraft identification, type, and color; radio frequencies to be used; proposed times of entry to and exit from the TFR area; the name of news media or organization and purpose of flight.

19–2–7. RESPONSIBILITIES

a. All FAA personnel approving or issuing TFRs must ensure that restrictions meet regulatory criteria and are issued in accordance with FAA directives.

b. The ATO Director of System Operations Security (or designee) must:

1. Review and, if warranted, approve TFRs issued for law enforcement activities in accordance with the provisions of 14 CFR Section 91.137.

2. Act as the operational representative for media concerns regarding active 14 CFR 91.137 TFRs.

c. ATO service area director (or designee) must:

1. Review all flight restrictions in their jurisdiction issued in accordance with 14 CFR 91.137 at least every 30 days.

2. Coordinate with affected air traffic facilities, event personnel, and local authorities when applicable.

3. Coordinate with the Domestic Events Network (DEN) air traffic security coordinator (ATSC) when hijacking situations are involved.

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

19–7–1. PURPOSE

This section prescribes guidelines and procedures in accordance with 14 CFR Section 91.145, Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events. Additionally, this section provides guidance on the processing of sponsor requests for these types of operations.

19–7–2. POLICY

a. Situations that may warrant a TFR under this section include, but are not limited to: military and civilian aerial demonstrations or major sporting events of limited duration to protect persons or property on the surface or in the air, to maintain air safety and efficiency, or to prevent the unsafe congestion of aircraft in the vicinity of an aerial demonstration or major sporting event.

b. All ATC regulatory actions to be considered for events of this type that will require an interpretation of, or exemption from, 14 CFR, must be forwarded to System Operations Airspace and Aeronautical Information Management, at least 90–days in advance of the event.

c. All nonregulatory avenues (e.g., drafting and dissemination of procedural information, temporary control tower, etc.) must be exhausted before considering regulatory restrictions.

d. Restrictions issued under this section prohibit the operation of any aircraft or device, or any activity within the designated airspace area except in accordance with the authorizations, terms, and conditions of the TFR published in the NOTAM, unless otherwise authorized by: (1) Air Traffic Control; or (2) A Certificate of Waiver or Authorization FAA Form 7711–1 issued for the aerial demonstration by Flight Standards.

e. Any procedural matters developed for the management of aircraft operations in the vicinity of aerial demonstrations and major sporting events that will require a procedural interpretation or waiver, must be forwarded to the Director of Terminal Operations at least 90–days in advance.

NOTE–
ATC must coordinate with the official responsible for the aerial demonstration prior to authorizing VFR or IFR aircraft to operate within the restricted airspace.

f. The ATCSCC is responsible for ensuring the balance of NAS demand with system capacity. As such, all efforts that address the management of aircraft operations in the NAS must be coordinated, prior to being finalized, with the ATCSCC to ensure that the planned operation would not overtly impact the system.

19–7–3. RESPONSIBILITIES

a. The Airspace and Rules Manager, System Operations Airspace and Aeronautical Information Management, oversees all regulatory actions issued under 14 CFR Section 91.145. Send TFR request information at least 45 days in advance of an aerial demonstration or major sporting event.

b. The Manager of Airspace Procedures oversees all procedures used in managing aircraft operations in the vicinity of aerial demonstrations and sporting events (refer to Chapter 18 of this order for additional guidelines regarding waiver and authorization responsibilities).

c. The regional ATO Service Area Director (or their designee) is responsible for the grant or denial of Certificate of Waiver or Authorization (FAA Form 7711–1) for the following Sections/parts of 14 CFR:

1. Section 91.117, Aircraft Speed.

2. Section 91.126, operating on or in the vicinity of an airport in Class G airspace.

3. Sections 91.131, 130, 129, 127 Operations in Class B, C, D, and E airspace areas respectively.

4. Section 91.135, Operations in Class A Airspace.

5. Part 101, Moored Balloons, Kites, Unmanned Rockets, and Unmanned Free Balloons.

6. Part 103, Ultralight Vehicles.

7. Part 105, Parachute Operations (except those Sections delegated to Flight Standards, refer to 19−7−3d).

d. Flight Standards (AFS) is responsible for ensuring the qualification of civil pilots, airworthiness of civil aircraft participating in these events; as well as the safety of persons and property on the ground affected by these events. In addition, AFS has the responsibility for the grant or denial of Certificate of Waiver or Authorization from the following Sections of 14 CFR:

1. Section 91.119, Minimum Safe Altitudes.

2. Section 91.175, Takeoff and Landing Under IFR.

3. Section 91.209, Aircraft Lights.

4. Section 91.303, Aerobatic Flight, Authorizing Industrial and Agricultural Support Operations.

5. Any Section listed in Section 91.905 as appropriate for aerobatic demonstrations and other aviation events.

6. Section 105.15, Jumps Over or into Congested Areas or Open Air Assembly of Persons, as Appropriate for Aerobatic Demonstrations and Other Aviation Events.

NOTE−
Applications for waiver or authorization that require both Air Traffic and Flight Standards technical considerations must be handled jointly. Additionally, a copy of all such waivers must be sent to the affected ATC facility(s) having control jurisdiction over the affected airspace and the regional (530) manager. Requests for a TFR, waiver, or authorization for an aviation event requires coordination with the appropriate ATC facility and the regional ATO Service Area Director.

19−7−4. RELATED DOCUMENTS

a. 14 CFR Section 91.145, Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events.

b. Advisory Circular 91−63, Temporary Flight Restrictions.

c. Advisory Circular 91−45, Waivers: Aviation Events contains information to assist prospective sponsors and other interested parties in planning and conducting an aviation event.

d. FAAO 8700.1, General Aviation Operations Inspector's Handbook contains information pertaining to the issuance of a Certificate of Waiver or Authorization.

19−7−5. COORDINATION

Air traffic facilities receiving requests for flight restrictions in accordance with 14 CFR Section 91.145 must maintain a chronological log of all related actions.

a. Facilities receiving these types of requests must obtain the following information from the notifying agency/office:

1. Name and organization of the person requesting the waiver.

2. A brief description of the event/activity.

3. The estimated duration of the restrictions (e.g., start date/time and termination date/time).

4. The name/telephone number, or other communications arrangements, of the on−scene official that would respond to any required coordination during the event. In addition, the name of the agent responsible for any on−scene emergency activities, if different from the above.

5. A description of the affected area, and any requested airspace area, by reference to prominent geographical features depicted on aeronautical charts, or by geographical coordinates and fixes when the latter is available.

6. A signed, written request from the individual requesting the waiver, which states the reason for the restriction.

b. Sporting Events.

1. Requests for sporting event restrictions must be forwarded to the appropriate regional ATO Service Area Director for action.

2. The regional ATO Service Area Director will review the request, and if it meets the criteria in accordance with 14 CFR Section 91.145, forward the their recommendation and all applicable information (including the signed, written request from the originator) to the Airspace and Rules Manager at least 30−days prior to the event.

3. If the TFR is not approved as requested, the Airspace and Rules Manager must inform the regional ATO Service Area Director, indicating the

basis for the disapproval. The regional ATO Service Area Director must inform the requestor of the disapproval and any available alternatives.

c. Aerial Demonstrations. Any request for a TFR, waiver, or authorization for an aviation event requires coordination with the appropriate ATC facility and the regional ATO Service Area Director at least 90 days prior to the event.

1. The NOTAM request and sample NOTAM must be submitted by the FSDO to the responsible ATC facility at least 90 days in advance of the aviation event. The NOTAM must reflect the dates, times, lateral and vertical limits of the airspace specified on the Certificate of Waiver or Authorization Application (FAA Form 7711−1).

2. The ATC facility coordinates the request with the regional ATO Service Area Director.

3. The regional ATO Service Area Director will review the request, and if it meets the criteria in accordance with 14 CFR Section 91.145, forward their recommendation and all applicable information (including the signed, written request from the originator) to the Airspace and Rules Manager at least 30−days prior to the event.

4. If approved by the Airspace and Rules Manager, the NOTAM will be forwarded to the U.S. NOTAM Office for publication. If at all possible, other means will be utilized to disseminate the information. (Class II publication, Chart Supplement U.S, AOPA website, etc.)

5. If the TFR is not approved as requested, the Airspace and Rules Manager must inform the regional ATO Service Area Director, indicating the basis for the disapproval. The Regional ATO Service Area Director must inform the requestor of the disapproval and any available alternatives.

19−7−6. SPECIAL TRAFFIC MANAGEMENT PROGRAM GUIDELINES

Each regional ATO Service Area Director is responsible for the drafting of special traffic management plans for the management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. Accordingly, the ATO Service Area Director, in concert with the affected facility personnel, must:

a. Consider the following when developing procedures for managing aircraft operations in the vicinity of aerial demonstrations and open−air assembly major sporting events:

1. Refer to Chapter 17, Traffic Management National, Center, and Terminal, of this order for additional guidelines regarding special traffic management programs.

2. Consideration should be given to the number and types of aircraft involved in the operation (e.g., non−radio equipped aircraft).

3. Procedures should specify the minimum airspace/altitude requirements to manage aircraft operations in the vicinity of the event.

4. Determine whether the event warrants the use of a temporary control tower.

b. Coordinate the proposed procedures with the ATO Airspace and Rules Manager, as appropriate, and forward the information to the ATO Publications.

c. Airspace and Rules Manager will disseminate the procedures to affected airspace users via:

1. The Notices to Airmen publication. If this publication is used, the required information must be sent to ATO Publications for processing, at least 60−days in advance of the event.

2. The NOTAM will be forwarded to the U.S. NOTAM Office for publication no later than 5 days prior to the event.

19−7−7. PROCESS FOR TFRs

a. When recommending the use of Section 91.145 to manage aircraft operations in the vicinity of aerial demonstrations, the following guidelines should be used:

1. Aerial demonstrations and sporting events occurring within Class B airspace areas should be handled through existing procedures, without additional restrictions. However, each situation is unique and should be addressed as such.

2. At times it may be necessary to issue restrictions to protect airspace not contained within regulated airspace. For an aerial demonstration, if any segment of the requested airspace is outside of regulated airspace, a restriction may be issued if the following criteria are met:

(a) Military aircraft are conducting aerobatic demonstrations.

(b) Civilian aircraft that operate in excess of 200 knots are conducting aerobatic demonstrations.

(c) Parachute demonstration teams are performing.

NOTE–
A Class D NOTAM (advisory NOTAM) will be issued for any aerial demonstration that does not require a TFR.

b. Restrictions issued by the Airspace and Rules Manager are regulatory actions, and all restrictions issued must consider the impact on nonparticipating aircraft operations. Accordingly, restrictions for aerial demonstrations will normally be limited to a 5 nautical mile radius from the center of the demonstration, at an altitude equal to aircraft performance, but will be no greater than the minimum airspace necessary for the management of aircraft operations in the vicinity of the specified area. Flight management restrictions for major sporting events should be implemented 1 hour before until 1 hour after each event, limited to a 1 nautical mile radius from the center of the event and 2,500 feet above the surface. Traffic management plans are to include marshalling aircraft (e.g., blimps, banner towing aircraft, media) on the periphery of these events.

19–7–8. REVISIONS AND CANCELLATIONS

a. When restrictions are necessary beyond the published termination date/time, the regional ATO Service Area Director must advise the Airspace and Rules Manager to ensure that a revised NOTAM and an appropriate cancellation are issued.

b. When it is obvious that the restrictions are no longer required, but no information to that effect has been received, the regional ATO Service Area Director must take action to ascertain the status of the restrictions from the agency/person that requested the restrictions.

c. For an Aerial Demonstration– The event organizer should submit two separate requests:

1. One to the ATO Service Area Director, at least 45 days prior to the event.

2. An application for a certificate of waiver or authorization (FAA Form 7711–2) for the restriction to the appropriate Flight Standards District Office, 90 days before the event for a civilian aerial demonstration and 120 days before the event for a military aerial demonstration.

d. For a Major Sporting Event– Submit the TFR request to the ATO Service Area Director at least 45 days in advance of the major sporting event. The ATO Service Area Director will assess the need for a TFR and forward their recommendation to the Airspace and Rules Manager. The Airspace and Rules Manager will determine whether a TFR is necessary and issue the TFR accordingly.

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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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16-7-3. TALLIES PRINTING

2. BACKGROUND: The proposed change to realign the En Route Flight Advisory Service (EFAS), known as "Flight Watch" in air-to-ground communications, to the Inflight position is part of an effort by Flight Service to modernize and streamline service delivery in order to increase efficiencies and value for its stakeholders. When EFAS was introduced in 1972, EFAS specialists received advanced training in aviation weather which included translating data received from radar and satellite displays. At the time, only flight service stations providing EFAS services had access to these products. Currently, all CONUS flight service specialists have access to common weather displays, such as radar and satellite imagery, as well as other weather products which were previously available only to EFAS specialists. Today, a pilot contacting Flight Watch for updated weather information is not able to obtain NOTAM information or flight planning services and must contact Flight Service on a different frequency. With this new approach, a pilot can obtain all services that Flight Service has to offer with one call. The elimination of overlapping services will allow for a smarter, more strategic allocation of limited resources.

3. CHANGE:

OLD	**NEW**
1-2-4. ABBREVIATIONS	**1-2-4. ABBREVIATIONS**
As used in this order, the following abbreviations have the meanings indicated: (See TBL 1-2-1.)	No Change
TBL 1-2-1 **ABBREVIATIONS**	***TBL 1-2-1*** **ABBREVIATIONS**
EFAS – En Route Flight Advisory Service	Delete
FW – Flight watch	Delete
FWA - Flight watch area	Delete
FWCS – Flight watch control station	Delete
2-4-1. SERVICE HOURS	**2-4-1. SERVICE HOURS**
ATC must be exercised and EFAS provided during published hours of operation. Early opening or late closing may be occasionally necessary to accommodate traffic which may otherwise divert or cancel its operation because air traffic control is not available at the airport. Good judgment, based on known or observed traffic, must be exercised when deciding to extend operating hours.	ATC must be provided during published hours of operation. Early opening or late closing may be occasionally necessary to accommodate traffic which may otherwise divert or cancel its operation because air traffic control is not available at the airport. Good judgment, based on known or observed traffic, must be exercised when deciding to extend operating hours.

OLD	NEW
3-4-2. ASSIGNMENT OF RECORDER CHANNELS	**3-4-2. ASSIGNMENT OF RECORDER CHANNELS**
Title through **a2(k)**	No Change
3. FSSs:	No Change
(a) Flight watch.	Delete
(b) through **(e)**	Re-letter **(a)** through **(d)**

OLD	NEW
4-6-6. FAA FORM 7230-10, POSITION LOG	**4-6-6. FAA FORM 7230-10, POSITION LOG**
Title through **c3(c)**	No Change
TBL 4-6-3	***TBL 4-6-3***
Field 3 - FSS	**Field 3 - FSS**
AA – Airport Advisory	Delete
AE – Service A Edit	Delete
BE – Service B Edit	Delete
CO – Coordinator	Delete
FW – Flight Watch	Delete
TT – Teletype	Delete
WC – Weather Coordinator	Delete

OLD	NEW
13-1-1. OPERATING POSITION DESIGNATORS	**13-1-1. OPERATING POSITION DESIGNATORS**
a. The following designators may be used to identify operating positions in an FSS. (See TBL 13-1-1.)	No Change
TBL 13-1-1	***TBL 13-1-1***
Operating Position Designators	**Operating Position Designators**
6. FW – Flight Watch	Delete
6 through **13**	Re–number **7** through **12**

OLD	NEW
13-2-3. POSITIONS/SERVICES	**13-2-3. POSITIONS/SERVICES**
Title through **e**	No Change
f. En Route Flight Advisory Service (EFAS): Provide graphic depiction of flight watch area and include communications outlets.	Delete

OLD	NEW
14-1-2. CERTIFICATES OF AUTHORITY	**14-1-2. CERTIFICATES OF AUTHORITY**
a. FSS personnel must obtain a certificate of authority from the NWS before performing the following functions:	**a.** FSS personnel must obtain a certificate of authority from the **FAA** before performing the following functions:

1. Weather observing.	No Change
2. Interpretation of weather radar.	**2. Pilot weather briefing.**
3. Pilot weather briefing.	Delete
4. EFAS (Flight Watch).	Delete
b. FSS personnel selected as Academy instructors who hold current certificates of authority for Weather Observations/Pilot Weather Briefings may maintain their currency by forwarding the certificates to the Weather Service Coordinator, AMA-514.	Delete
Add	***REFERENCE–*** ***FAA Order JO 7220.4, FAA Certification of Pilot Weather Briefing***

OLD	**NEW**
Chapter 14, Section 3. En Route Flight Advisory Service (EFAS)	Delete
14-3-1. GENERAL	Delete
EFAS, Radio call; "FLIGHT WATCH" is a service specifically designed to provide en route aircraft with timely and meaningful weather advisories pertinent to the type of flight being conducted. This information is limited to near-time or real-time weather that will directly affect an aircraft-s route of flight. Full weather briefings and nonweather aeronautical information are not provided by Flight Watch Specialists (FWS).	Delete
14-3-2. FLIGHT WATCH AREA (FWA)	Delete
The FWA is the area within which EFAS is provided by the Flight Watch Control Station (FWCS).	Delete
a. The FWA must normally be defined by the boundary of the associated ARTCC plus 100 NM.	Delete
b. The Flight Services Operations Service Area Director may redesignate the FWA when necessary to accommodate service responsibilities at facilities not yet consolidated into ARTCC areas. These FWAs will vary according to the number and range of the communications outlets, but should include an area that overlaps adjacent FWCS operational areas by at least 50 NM.	Delete
14-3-3. SYSTEM CONFIGURATION	Delete
a. EFAS must be provided to aircraft within communications coverage of the FWCS. This will normally be considered congruent to the FWA.	Delete
b. Remote Communication Facilities (RCF) locations must be at an FSS, an existing RCF, or a VOR location when possible. The locations may be adjusted when it is advantageous to do so for reasons such as better communications coverage, leasing problems, etc.	Delete

c. Communications, through local or remote outlets, must be provided to enable pilots operating at or above 5,000 feet above ground level to maintain communications over the area served by the FWCS.	Delete
d. Frequency 122.0 MHz must be provided as a common frequency at all EFAS facilities and used for communications with aircraft flying below 18,000 feet MSL.	Delete
e. An assigned discrete frequency must be available for communications with aircraft operating at FL180 and above within each FWCS's associated ARTCC area. This does not preclude use of the frequency for communications with aircraft operating at a lower altitude where frequency coverage permits.	Delete
14-3-4. HOURS OF OPERATION	Delete
EFAS must be available from 6 a.m. to 10 p.m. local time, 7 days a week. The Flight Services Operations Service Area Office, with concurrence of the Vice President, Flight Services, may authorize extension of hours or a 24-hour operation when it is determined that expanded or continuous operation is essential to aviation safety.	Delete
14-3-5. STAFFING	Delete
a. The EFAS operating position must be manned by certified FWS. Each FWCS must be staffed sufficiently for the authorized hours of operation. The Flight Services Operations Service Area Office can authorize additional staffing levels when justified and requested by the facility air traffic manager.	Delete
b. During periods of high activity, an additional specialist may be assigned to the position to assist the FWS in the processing, posting, and dissemination of weather information. It is not required that this specialist be EFAS qualified to perform these duties.	Delete
14-3-6. NATIONAL WEATHER SERVICE (NWS) SUPPORT	Delete
a. The NWS area manager (normally the WFO meteorologist-in-charge) of the WFO within which the FWCS is located, or as designated by the NWS regional office, has the responsibility to monitor and evaluate the various links between the NWS and FAA facilities. The air traffic manager must coordinate with the designated NWS area manager to establish and maintain EFAS/NWS local procedures.	Delete

b. The CWSU of the associated ARTCC is designated as the primary operational support facility for the FWCS. The CWSU will, to the extent practicable, commensurate with other duties:	Delete
1. Provide duty briefings once per shift, as initiated by the FW specialist, which will include a thorough description of meteorological conditions which are impacting, or are expected to impact, aviation weather within the FW/ARTCC area.	Delete
2. Provide expertise for consultation of ongoing weather trends during the hours the CWSU is operational.	Delete
c. Support for EFAS operational questions or clarification concerning weather is also provided by the associated WFO and the National Aviation Weather Advisory Unit (NAWAU) for specific products originated by these offices. The WFO will also provide EFAS support, (weather consultation) as necessary, when CWSU service is unavailable.	Delete
NOTE– *The CWSU hours of operation are normally the same as the EFAS facility. Preparation and priority duties may preclude extended service for the first 1 to 2 hours of operation.*	Delete
14-3-7. EQUIPMENT	Delete
A separate position of operation must be provided for EFAS. The following equipment and/or material must be terminated in, or readily accessible at, the EFAS console:	Delete
a. Graphic weather chart, computer "view sequences," and written message display equipment.	Delete
b. Weather radar displays to provide presentations from local and remote sites covering the associated ARTCC area plus 100 NM when available and feasible. (Dependent on sites and coverage.)	Delete
c. Weather satellite displays.	Delete
d. Alphanumeric Service A weather data.	Delete
e. FSS/NWS lines. Access must be provided to the associated CWSU and WFO providing aviation meteorological support.	Delete
f. Position recording of the FW position and an associated time signal must be provided at FWCSs.	Delete
g. PIREP display. A PIREP graphic display, computer "view sequence" or manual equivalent (written) must be provided at the EFAS position for display and maintenance of pilot reported weather conditions over the FWA.	Delete

14-3-8. TRAINING	Delete
a. Classroom Training. Successful completion of an FAA approved Flight Service Station En Route Flight Advisory Service course is required prior to position certification.	Delete
b. Facility Training. "Facility qualification training and certification requirements for the FWS position must be developed and administered using the guidance contained in FAAO 3120.4, Air Traffic Technical Training."	Delete
14-3-9. CERTIFICATION	Delete
The following personnel must be certified on the FWS position:	Delete
a. All newly selected FWS.	Delete
b. All first-line supervisors assigned to FWCS locations. The certification must be accomplished within 1 year of selection or during the probationary period.	Delete
c. All permanently assigned training specialists and quality assurance specialists at FWCS locations. Resident Course 50201 should be completed within the first year of assignment.	Delete
14-3-10. RECERTIFICATION REQUIREMENTS	Delete
a. Previously certified personnel, after an absence of more than 120 days but less than 1 year, must be provided refresher training at the facility as determined by the facility manager and recertified on the position by their first-line supervisor.	Delete
b. Previously certified personnel, after an absence of more than 1 year from the FWS duties, must be provided refresher training at the facility as determined by the facility manager, pass an EFAS Recertification Examination by the FAA Academy NWS Unit, and be recertified on the position by their first-line supervisor.	Delete
c. The EFAS certification exam is maintained by FAA Academy NWS Unit, Mike Monroney Aeronautical Center. To obtain a copy, forward a written or electronic request to the FAA Academy NWS Unit. Instructions for administration and grading of the examination will be included in the package.	Delete
14-3-11. QUALIFICATION AND SELECTION	Delete
a. To be considered for an EFAS position, an air traffic control specialist must have, as a minimum, 2 years experience as a facility-rated FPL specialist.	Delete

b. All personnel must be selected under applicable agency personnel policies.	Delete
Section 4. Broadcasts	**Section 3. Broadcasts**
14–4–1 through **14–4–4**	Renumber **14–3–1** through **14–3–4**
OLD	**NEW**
16-2-1. AIRCRAFT CONTACTED	**16-2-1. AIRCRAFT CONTACTED**
Title through **d**	No Change
e. For EFAS, one aircraft contacted count may be taken for each communications outlet over which the same aircraft is provided service.	Delete
OLD	**NEW**
16-5-2. EFAS MONTHLY REPORT	Delete
Facilities which provide EFAS should record and submit this monthly activity on FAA Form 7230-13, plainly marked "EFAS."	Delete
16-5-3 through **16-5-5**	Renumber **16-5-2** through **16-5-4**
OLD	**NEW**
16-5-3. DISTRIBUTION AND AMENDMENT	**16-5-2. DISTRIBUTION AND AMENDMENT**
a. Distribute FAA Form 7230-13 (FSS Activity) and FAA Form 7230-13 (En Route Flight Advisory System only) as follows:	**a.** Distribute FAA Form 7230-13 (FSS Activity) as follows:
OLD	**NEW**
Chapter 16, Section 6. FSS Printing of Lists and Tallies (Model 1 Full Capacity)	Delete
16-6-1. PRINTING OF LISTS	Delete
a. Every hour on the minute specified by the Inbound List Print Interval (ILPI) system parameter, the Suspense List and the Inbound List must be printed at the appropriate FSS on the flight plan (FP) printer. For each list and FSS, this function must:	Delete
1. Retrieve the list data from the data base.	Delete
2. Format the title and the column headings.	Delete
3. List the entries in chronological order.	Delete
b. The Inbound List hourly printout consists of:	Delete
1. Time.	Delete
2. ACID.	Delete
3. Type of Flight.	Delete
4. A/C Type.	Delete
5. Departure.	Delete
c. The Suspense List hourly printouts consist of:	Delete
1. Time.	Delete

2. Message ID and/or ACID.	Delete
3. Type.	Delete
4. Addresses.	Delete
d. The Inbound List and the Suspense List printouts must be retained for l5 days.	Delete
OLD	**NEW**
16-6-2. PRINTING OF TRANSACTIONS INVOLVING LIST UPDATES	Delete
Transactions involving updates must be printed at the time of the transaction at the affected FSS on the flight movement printer.	Delete
a. The conditions for this function are a Flight Data List being updated by:	Delete
1. Acknowledging a general Service B message.	Delete
2. Not acknowledging the last address of a flight plan.	Delete
3. Receipt of an inbound flight plan.	Delete
4. Receipt of a change ETA message.	Delete
5. Receipt of a Roger message.	Delete
b. The List Update printouts must be retained for l5 days.	Delete
OLD	**NEW**
16-6-3. FLIGHT PLAN LOG PRINTING	Delete
The Flight Plan Log must be printed on the FP printer for the appropriate FSS once a day at the Log/Tally Print Time (LOGT) for that FSS. The entries in the log must be printed in chronological order.	Delete
a. The Flight Plan Log must consist of:	Delete
1. Date/Time.	Delete
2. ACID.	Delete
3. Types of Flight.	Delete
4. Departure Point.	Delete
5. Destination.	Delete
6. Position Number.	Delete
b. Should the log buffer for an FSS become full (l00,000 characters) before the LGOT, the data will be printed.	Delete
c. The Flight Plan Log printout must be retained for l5 days.	Delete
OLD	**NEW**
16-6-4. PREFLIGHT BRIEFING LOG PRINTING	Delete

The Preflight Briefing Log must be printed on the FP printer for the appropriate FSS once a day at the LOGT for the FSS. The entries in the log must be printed in chronological order.	Delete
a. The Preflight Briefing Log must consist of:	Delete
1. Time.	Delete
2. ACID.	Delete
3. Departure Point.	Delete
4. Destination.	Delete
5. Position Number.	Delete
6. Remarks.	Delete
b. Should the log buffer for an FSS become full (l00,000 characters) before the LOGT, the data will be printed.	Delete
c. The Preflight Briefing Log printout must be retained for l5 days.	Delete
OLD	**NEW**
16−6−5. IN−FLIGHT CONTACT LOG PRINTING	Delete
The In−Flight Contact Log print function must be printed on the FP printer for the appropriate FSS once a day at the LOGT for the FSS. The entries in the log must be printed in chronological order.	Delete
a. The In−Flight Contact Log must:	Delete
1. Retrieve the data from the In−Flight Contact Log.	Delete
2. Format the title and the column headings.	Delete
3. Sum the tallies.	Delete
4. List the entries in chronological order.	Delete
b. Should the log buffer for a FSS become full (l00,000 characters) before the LGOT, the data will be printed.	Delete
c. The In − Flight Contact Log printout must be retained for l5 days.	Delete
16-6-6. TALLIES PRINTING	Delete
The tally print function must print the tallies on the FP printer or to a personal computer (PC) assigned to collect the data once a day at the LOGT for the FSS.	Delete
a. The Terminal Daily Tally and the Summary of Daily Tallies must be printed or sent to a PC assigned to collect the data. The tallies for the Terminal Daily Tally are summed from the log entries for each of the terminal entries. The following type of logging must be done by the system:	Delete

1. From the In-Flight Contact Log:	Delete
(a) Radio contacts.	Delete
(b) Aircraft contacted.	Delete
(c) Pilot briefs.	Delete
2. From the Preflight Briefing Log, pilot briefs.	Delete
3. From the Flight Plan Log:	Delete
(a) International.	Delete
(b) Military.	Delete
(c) Civil.	Delete
(d) IFR.	Delete
(e) VFR.	Delete
4. Flight services.	Delete
b. The tallies for the Summary of Daily Tallies are the sums of the terminal tallies for a FSS plus any modifications to the tallies made by the Facility Supervisor's Terminal (FST). The tally section labeled "Aircraft Contacted-International," must be omitted if there are no entries for the terminal and the FSS. Tallies are printed or sent to a PC assigned to collect the data at the scheduled time, even if interim printing of logs has occurred due to a full buffer.	Delete
c. Use the Summary of Daily Tallies to complete FAA Form 7230-l3.	Delete
REFERENCE– *FAAO JO 7210.3, Para 16-5-3, Distribution and Amendment.*	Delete
d. The Summary of Daily Tallies printout or computer records must be retained for l5 days.	Delete
OLD	**NEW**
16-6-7. FLIGHT PLAN PRINTING	Delete
The FP print function prints the fields associated with the flight plan when it is modified, is deleted, remains on the Proposed List longer than the Flight Plan Drop Interval (FPDI), or is the recycle of a Roger message (when acknowledging the last address of a flight plan.)	Delete
a. The data must be formatted with a title indicating what action is being performed (modified or deleted) and which list is affected. The formatted data must be printed on the flight movement printer at the affected FSS. The printing will be done after completion of the transaction.	Delete
b. The FP printout must be retained for l5 days.	Delete
OLD	**NEW**
16-6-8. DISABLED SYSTEM COMPONENT PRINTING	Delete

a. The Disabled System Component printing function will print the Failed Component Message at the affected FSS printer and on the display processor printer for the FSS COTC.	Delete
b. The Disabled System Component printout must be retained for l5 days.	Delete
Section 7. FSS LISTS, LOGS, and TALLIES (OASIS)	**Section 6. FSS LISTS, LOGS, and TALLIES (OASIS)**
OLD	**NEW**
16-7-3. TALLIES PRINTING	**16-6-3. TALLIES PRINTING**
Title through **a**	No Change
b. Pilot Weather Briefing (PWB) Tally: Preflight Domestic, Preflight ICAO, Inflight Domestic, Inflight ICAO, Flight Watch Domestic, Flight Watch ICAO.	**b.** Pilot Weather Briefing (PWB) Tally: Preflight Domestic, Preflight ICAO, Inflight Domestic, Inflight ICAO.
b1 through **d4**	No Change
e. Flight Watch Position Aircraft Contact Tally: IFR, DVFR, VFR, ICAO IFR, ICAO VFR.	Delete
1. Air Carrier.	Delete
2. Air Taxi.	Delete
3. General Aviation.	Delete
4. Military.	Delete
f. Flight Watch Position Radio Contact Tally: IFR, DVFR, VFR, ICAO IFR, ICAO VFR.	Delete
1. Air Carrier..	Delete
2. Air Taxi.	Delete
3. General Aviation.	Delete
4. Military.	Delete
g through **i**	Re-letter **e** through **g**

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1. PARAGRAPH NUMBER AND TITLE:
1-2-4. ABBREVIATIONS
5-2-2. FLIGHT INSPECTION AIRCRAFT
6-4-2. MINIMUM IFR ALTITURES (MIA)
8-3-1. DIGITAL MAP VERIFICATION
10-3-6. ILS/MLS HEIGHT/DISTANCE LIMITATIONS
11-2-10. DIGITAL MAP VERIFICATION
11-8-10. DIGITAL MAP VERIFICATION

2. BACKGROUND: Due to an internal reorganization within Technical Operations (AJW), all scheduling and coordination for Flight Inspections Services (FIS) have been consolidated at Flight Inspection Central Operations (FICO) in Oklahoma City. While Flight Inspection Field Offices (FIFO) are still in operation, Flight inspection Area Offices (FIAO) no longer exist.

3. CHANGE:

OLD	NEW
1-2-4. ABBREVIATIONS As used in this order, the following abbreviations have the meanings indicated: (See TBL 1-2-1.)	**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**	*TBL 1-2-1* **ABBREVIATIONS**
FIAO –Flight inspection area office	Delete
Add	**FICO– Flight Inspection Central Operations**

OLD	NEW
5-2-2. FLIGHT INSPECTION AIRCRAFT	**5-2-2. FLIGHT INSPECTION AIRCRAFT**
a. FAA aircraft engaged in flight inspection of navigation aids must be provided special handling by ATC facilities to the maximum extent possible. FIAOs/flight inspectors are expected to coordinate with the facility's air traffic supervisor on duty, or a designated representative, prior to conducting flight inspections. Occasionally, due to unplanned/special flight inspection requirements, flight inspectors may attempt to conserve flight hours and accomplish additional opportune flight checks with minimal advance coordination.	**a.** FAA aircraft engaged in flight inspection of navigation aids must be provided special handling by ATC facilities to the maximum extent possible. **FICO**/flight inspectors are expected to coordinate with the facility's air traffic supervisor on duty, or a designated representative, prior to conducting flight inspections. Occasionally, due to unplanned/special flight inspection requirements, flight inspectors may attempt to conserve flight hours and accomplish additional opportune flight checks with minimal advance coordination.
b	No Change
c. Many terminal and en route flight inspections are accomplished using automatic recording equipment, and an uninterrupted flight is necessary for the successful accomplishment of the flight. Maximum cooperation will help the FIAOs accomplish their job within their limited aircraft resources. FAAO 8240.41, Flight Inspection/Air Traffic On–site Coordination Requirements, provides additional details as does FAA0 7110.65, Air Traffic Control.	**c.** Many terminal and en route flight inspections are accomplished using automatic recording equipment, and an uninterrupted flight is necessary for the successful accomplishment of the flight. Maximum cooperation will help the **FICO** accomplish their job within their limited aircraft resources. FAAO 8240.41, Flight Inspection/Air Traffic On–site Coordination Requirements, provides additional details as does FAA0 7110.65, Air Traffic Control.
d. Facility procedures must provide a means of passing impending flight inspection information on to subsequent shifts and/or immediately notifying FIAOs/PICs when facility air traffic activities make it impossible to handle flight inspections expeditiously.	**d.** Facility procedures must provide a means of passing impending flight inspection information on to subsequent shifts and/or immediately notifying **FICO** when facility air traffic activities make it impossible to handle flight inspections expeditiously.

OLD

6-4-2. MINIMUM IFR ALTITURES (MIA)

Determine minimum IFR altitude information for each control sector and display them at the sector. This must include off–airway minimum IFR altitude information to assist controllers in applying 14 CFR Section 91.177 for off–airway vectors and direct route operations. Facility air traffic managers must determine the appropriate chart/map method for displaying this information at the sector. Forward charts and chart data records to the FIFO for certification and annual review.

NEW

6-4-2. MINIMUM IFR ALTITURES (MIA)

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

OLD

8-3-1. DIGITAL MAP VERIFICATION

Verification of the accuracy of new or modified digital maps must be accomplished through the use of “targets of opportunity” over displayed fixes, navigational aids, etc. Any observed discrepancies must be documented to indicate the observed direction and displacement. If any errors cannot be corrected or if a facility is otherwise dissatisfied with the results from “targets of opportunity,” a request may be made through the FIFO for a flight check. If no discrepancies are noted, no documentation is required.

NEW

8-3-1. DIGITAL MAP VERIFICATION

Verification of the accuracy of new or modified digital maps must be accomplished through the use of “targets of opportunity” over displayed fixes, navigational aids, etc. Any observed discrepancies must be documented to indicate the observed direction and displacement. If any errors cannot be corrected or if a facility is otherwise dissatisfied with the results from “targets of opportunity,” a request may be made through the **FICO** for a flight **inspection**. If no discrepancies are noted, no documentation is required.

OLD

10-3-6. ILS HEIGHT/DISTANCE LIMITATIONS

Title through **b**

b. If an operational need to exceed these limitations exists, inform the FIFO, and they will flight check the ILS to the stipulated requirement. Ensure that current flight check data are available to facility personnel.

NEW

10-3-6. ILS HEIGHT/DISTANCE LIMITATIONS

No Change

b. If an operational need to exceed these limitations exists, **ATC submits an Expanded Service Volume (ESV) request IAW 8260.19, with a description of the flight procedure requiring it. Flight inspection must validate the ESV.**

OLD

11-2-10. DIGITAL MAP VERIFICATION

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

NEW

11-2-10. DIGITAL MAP VERIFICATION

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

OLD

11-8-10. DIGITAL MAP VERIFICATION

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

NEW

11-8-10. DIGITAL MAP VERIFICATION

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

1. PARAGRAPH NUMBER AND TITLE:
2-1-6. CHECKING ACCURACY OF PUBLISHED DATA
2-2-11. PERSONNEL BRIEFINGS REGARDING ORDER CHANGES

2. BACKGROUND: Change 3 of FAA Order 7210.3Y, 2-1-6, identified instrument flight procedures as a specific item to review for changes for/at publication. The web address published to facilitate the locating of new and amended procedures does not identify all aeronautical data changes (i.e., stand-alone fixes, airport data, etc.). This data is published by the National Flight Data Center (NFDC) via other web sites that need to be listed for reference. Accordingly, aeronautical data, in addition to instrument flight procedures, should be specifically identified as an item to be reviewed for accuracy at publication. There is implied direction for the briefing of aeronautical data changes; however, explicit direction to brief aeronautical data and flight procedure changes will clarify that requirement.

3. CHANGE:

OLD	NEW
2-1-6 CHECKING ACCURACY OF PUBLISHED DATA	**2-1-6 CHECKING ACCURACY OF PUBLISHED DATA**
Air traffic managers and air traffic representatives (ATREPs) must, upon receipt of official publications, review data pertaining to their facilities and areas of concern to ensure accuracy and completeness. When pertinent national procedures or local instrument flight procedures are created or changed, review facility standard operating procedures (SOPs) directives, position/sector binders, reference files, and/or letters of agreement (LOAs) and initiate corrections as required.	Air traffic managers and air traffic representatives (ATREPs) must **ensure**, upon receipt of official publications, **that a** review **of** data pertaining to their facilities and areas of concern **is accomplished** to ensure accuracy and completeness. When pertinent national procedures**, aeronautical data** or flight procedures are created or changed, review facility standard operating procedures (SOPs) directives, position/sector binders, reference files, and/or letters of agreement (LOAs) and initiate corrections **and briefings** as required.
NOTE– *Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/*	***NOTE–*** **1.** *Information related to subscribing for alerts regarding upcoming changes to instrument flight procedures is available at the Instrument Flight Procedures Information Gateway: https://www.faa.gov/air_traffic/ flight_info/aeronav/procedures/*
Add	**2.** ***Additional digital AeroNav Products are available via the following websites:*** ***a. https://www.faa.gov/air_traffic/flight_info/aeronav/procedures*** ***b. http://aerochart.faa.gov***
Add	**3.** ***Information on aeronautical data changes is available at the National Flight Data Center (NFDC) web portal of which a subscription should be requested, Check NFDD and Transmittal Letters: https://nfdc.faa.gov***

Add	**4.** ***Notice to Airman information may be viewed at: https://notams.aim.faa.gov/notamSearch/disclaimer.html***
REFERENCE– *FAAO JO 7210.3, Para 2-1-2, Facility Standard Operating Procedures Directive* *FAAO JO 7210.3, Para 4-3-3, Developing LOA* *FAAO JO 7210.3, Para 4-3-6, Annual Review/Revisions*	***REFERENCE–*** *FAAO JO 7210.3, Para 2-1-2, Facility Standard Operating Procedures Directive* ***FAAO JO 7210.3, Para 2-1-3, Position/Sector Binders*** ***FAAO JO 7210.3, Para 2-2-11, Personnel Briefings Regarding Orders, Published Aeronautical Data and Flight Procedures*** *FAAO JO 7210.3, Para 4-3-3, Developing LOA* *FAAO JO 7210.3, Para 4-3-6, Annual Review/Revisions* ***FAAO JO 7930.2, Notices to Airmen*** ***FAAO JO 8260.1,9 Flight Procedures and Airspace*** ***FAAO JO 8260.3, United States Standard for Terminal Instrument Procedures (TERPS)*** ***FAAO JO 8260.43, Flight Procedures Management Program***
OLD	**NEW**
2-2-11. PERSONNEL BRIEFINGS REGARDING ORDER CHANGES	**2-2-11. PERSONNEL BRIEFINGS REGARDING ORDERS, PUBLISHED AERONAUTICAL DATA, AND FLIGHT PROCEDURES**
Air traffic managers must ensure that facility air traffic personnel are verbally briefed on changes to FAAO JO 7110.65, Air Traffic Control, FAAO JO 7210.3, Facility Operation and Administration, and FAAO JO 7110.10, Flight Services, and other appropriate directives, that have operational/procedural significance	**a.** Air traffic managers must ensure that facility air traffic personnel are verbally briefed on changes to FAAO JO 7110.65, Air Traffic Control, FAAO JO 7210.3, Facility Operation and Administration, and FAAO JO 7110.10, Flight Services, and other appropriate directives, that have operational/procedural significance.
Add	**b. Air traffic managers must ensure that facility air traffic personnel are briefed prior to implementation on changes identified in the review of published aeronautical data and flight procedures that have operational/procedural significance or will likely have an effect on their facility's air traffic services. To the extent possible these briefings should be initiated within 30 days prior to the date of the change.**
Add	***REFERENCE–*** ***FAAO JO 7210.3, Para 2-1-6, Checking Accuracy of Published Data***

1. PARAGRAPH NUMBER AND TITLE: 2-1-9. HANDLING MANPADS INCIDENTS

2. BACKGROUND: Changes to reporting responsibilities and obsolete procedures have necessitated updates and clarifications to MANPADS paragraphs in FAA Order JO 7610.4, Special Operations, FAA Order JO 7210.3, Facility Operation and Administration, and FAA Order JO 7110.65, Air Traffic Control. The updates include requiring ATC facilities to report any MANPADS threat received to the the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).

3. CHANGE:

OLD	NEW
2-1-9. HANDLING MANPADS INCIDENTS	**2-1-9. HANDLING MANPADS INCIDENTS**
Title through **a**	No Change
b. Air traffic managers must establish procedures to ensure the dissemination of level 2 or 3 MANPADS alerts via ATIS and/or controller-to-pilot transmissions. Report MANPADS threat/attack/post-event activity until notified otherwise by FAA national headquarters.	**b.** Air traffic managers must establish procedures to ensure the dissemination of **MANPADS alert level 2 (credible threat)/alert level 3 (reported attack) and post-event activity** via ATIS and/or controller-to-pilot transmissions. **These reports must continue** until notified otherwise by **the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).**
REFERENCE– *FAAO JO 7110.65, Para 2-9-3, Content.* *FAAO JO 7110.65, Para 10-2-13, MANPADS Alert.*	***REFERENCE–*** *FAAO JO 7110.65, Para 2-9-3, Content.* *FAAO JO 7110.65, Para 10-2-13, MANPADS Alert.* ***FAAO JO 7610.4, Para 16-1-3, Responsibilities.***
Add	**c. Air traffic managers must ensure the Operations Manager/FLM/controller-in-charge (CIC) notifies the DEN ATSC of any MANPADS threat or attack as soon as possible. In the event of an observed or reported MANPADS launch, the initial report to the DEN ATSC must include the following information:**
Add	**1. Call sign (if known);**
Add	**2. Type aircraft (if known);**
Add	**3. Coordinated Universal time;**
Add	**4. Position/location of event;**
Add	**5. Altitude (if known); and**
Add	**6. Any other pertinent information (e.g., contrail sighting, additional pilot or ATC observation reports, law enforcement contact, etc.).**

1. PARAGRAPH NUMBER AND TITLE: 2-1-28. SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES

2. BACKGROUND: ATC information for identifying suspicious situations and reporting requirements for suspicious aircraft/pilot activity to the Domestic Events Network (DEN) are contained in Paragraph 7-3-1 of FAA Order JO 7610.4, Special Operations, which is password-protected as "For Official Use Only." The specific reporting requirements for ATC facilities are an existing responsibility and also unclassified information. Therefore, the reporting requirements for suspicious activity are added to FAA Order JO 7210.3, Facility Operation and Administration, Paragraph 2-1-28, Suspicious Aircraft/Pilot Activities for easier access. Paragraph 7-3-1 of FAA Order JO 7610.4, Special Operations, will remain in the 7610.4. Newly added is a requirement for ATC to report to the DEN any general aviation arriving from an international point that request a divert from its original U.S. destination airport. This new requirement will aid in the DEN alerting U.S. Customs and Border Patrol (CBP) to such situations.

3. CHANGE:

	OLD	**NEW**
	2-1-28. SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES	**2-1-28. REPORTING SUSPICIOUS AIRCRAFT/PILOT ACTIVITIES**
	Facility air traffic managers must ensure that processes are in place to direct prompt notification to the DEN of any suspicious aircraft/pilot activities as prescribed in FAA Order JO 7610.4, paragraph 7-3-1.	**a.** Facility air traffic managers must ensure that **the operational supervisor/controller-in-charge promptly reports any suspicious aircraft/pilot activities to the Domestic Events Network (DEN) Air Traffic Security Coordinator (ATSC).**
Add		***NOTE–*** ***Additional information for ATC on identifying suspicious situations is located in FAAO JO 7610.4, Special Operations, paragraph 7-3-1, Suspicious Aircraft/Pilot Activity.***
Add		**b. The DEN ATSC must be notified as soon as possible of any suspicious activity, including the following:**
Add		**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.**
Add		**2. An aircraft fails to turn on or changes from its assigned transponder beacon code (other than approved emergency/radio failure beacon code).**
Add		**3. An aircraft deviates from its assigned route of flight/altitude and refuses to return to it when instructed.**
Add		**4. Phantom or inappropriate transmissions such as unusual questions about military activities or sensitive/secure areas.**

Add	**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.**
Add	**6. Pilot reports flight difficulties with no eventual explanation or response to ATC.**
Add	**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.**
Add	**8. Any general aviation arriving from an international departure point that requests to divert from the original U.S. destination airport.**
Add	**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.**
Add	**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.**
Add	***REFERENCE−*** ***Advisory Circular 91-57, Model Aircraft Operating Standards.***
Add	**11. Any situation or pilot activity (e.g., 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 (e.g., airline air operations center) rather than the aircrew itself.**

1. PARAGRAPH NUMBER AND TITLE: 2-1-32. TRANSPORTATION SECURITY ADMINISTRATION AND FAA JOINT OPERATING PROCEDURES

2. BACKGROUND: A signed agreement stating the joint operating procedures between the Transportation Security Administration (TSA) and the FAA was effective on December 6, 2009. The agreement specifies requirements for Air Traffic Managers (ATM) to follow during security events, including those that where there is an imminent and potentially life threatening security situation. A Memorandum originating from the FAA's Vice-President of Terminal Services advised the field, on the same date, that compliance with the agreement was required. This DCP adds a new paragraph to FAA Order 7210.3, Facility Operation and Responsibilities, that reflects the ATM responsibilities according to the agreement.

3. CHANGE:

OLD	NEW
Add	**2-1-32. TRANSPORTATION SECURITY ADMINISTRATION AND FAA JOINT OPERATING PROCEDURES**
Add	**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:**
Add	**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.**
Add	**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.**
Add	**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.**

Add	**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.**
Add	**e. The responsibilities outlined in sub-paragraph 2-1-32a may be delegated as necessary.**

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1. PARAGRAPH NUMBER AND TITLE: 2-2-8. GENOT HANDLING

2. BACKGROUND: N JO 7210.612 GENOT Handling, issued on October 3, 2005, revised the General Notifications (GENOT) distribution procedure in FAA Order JO 7210.3, Facility Operation and Administration Paragraph 2-2-8, GENOT Handling. This notice removed the requirement for Lockheed Martin (LM) managed Flight Service Stations (FSS) to distribute GENOTs. The notice expired without the incorporation of the this guidance into FAA Order JO 7210.3, Paragraph 2-2-8. Additionally, a reorganization occurred after the issuance of N JO 7210.612, changing the titles of lines of business within the Air Traffic Organization (ATO).

3. CHANGE:

OLD	NEW
2-2-8. GENOT HANDLING	**2-2-8. GENOT HANDLING**
A GENOT initiated by headquarters ATO organizations, requiring distribution to air traffic facilities, must be transmitted to all Service Area offices, Flight Service Stations (FSS), and ARTCCs.	**A General Notice (GENOT) is issued by headquarters ATO organizations and must be transmitted to all Air Traffic Service Area offices, Flight Service Stations (FSS) and ARTCCs. Air Traffic Service Area offices and/or Flight Services Information Area Group offices must define distribution responsibility by field facilities based upon their ability to distribute GENOTs in a timely fashion, workload and areas of jurisdiction. Upon receipt, Air Traffic Facility Managers must:**
a. Terminal Operations Service Area office must distribute GENOTs to the following using the most expeditious means available:	**a. Distribute GENOTs to other facilities as determined by their respective Air Traffic Service Area office or Flight Services Information Area Group office.**
Add	***NOTE–*** **1.** ***Distribution may be via facsimile, telephone, electronic mail (e-mail), etc.*** **2.** ***Facilities can improve the process of GENOT distribution by reporting the distribution/reception of multiple copies of the same GENOT to their respective Air Traffic Service Area office or Flight Services Information Area Group office.***
1. FAA contract and non–Federal towers.	Delete
2. FAA military ATREPS assigned to the service area.	Delete

NOTE– *The most expeditious means is transmitting the GENOT via facsimile, telephone, mail, electronic mail, etc.*	Delete
b. The FSS must distribute the GENOT to all FAA field facilities addressed, except ARTCCs, within their designated areas as determined by the respective Service Area office using the most expeditious means available.	**b. Determine if the contents of the GENOT is applicable to their facility.**
REFERENCE– *FAAO JO 7210.3, Para 2-2-8a2 Note.*	Delete
c. Terminal Hub facilities distribute all GENOTs in plain language format to all non–Federal and contract ATCTs which are located within their Hub Area. The GENOT must be distributed in the most expeditious means available.	**c. Use the content to determine the priority of distribution.**
REFERENCE– *FAAO JO 7210.3, Para 2-2-8a2 Note.*	Delete
d. Air traffic managers at all facilities must:	**d. Ensure information required to achieve operational mission is briefed prior to an employee performing their duties.**
Add	***NOTE–*** ***Managers should update employee's Training and Proficiency Record in accordance with FAA Order JO 3120.4, Air Traffic Technical Training.***
1. Disseminate GENOT information to concerned facility personnel. The content of the message will dictate the priority of the distribution.	Delete
2. Ensure that all employees with a need to know are thoroughly briefed on the change prior to performing their duties.	Delete
3. Ensure that the appropriate entry is made in the employee's Training and Proficiency Record, Form 3120–1.	Delete

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1. PARAGRAPH NUMBER AND TITLE: 3-3-4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHZ

2. BACKGROUND: This paragraph is being modified to support the rehoming of emergency frequencies by Flight Service Stations to the the overlying Radar Approach Controls or Air Route Traffic Control Centers (ARTCCs). Rehoming will place aircraft broadcasting on emergency frequencies in urgent or emergency situations into immediate contact with radar equipped facilities which will be able to provide direct assistance, thus enhancing safety.

3. CHANGE:

OLD	NEW
3-3-4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHZ	**3-3-4. EMERGENCY FREQUENCIES 121.5 AND 243.0 MHZ**
Title through **a**	No Change

b. Normally, ARTCC emergency frequency capability must be limited to the transmitter/receiver site nearest the ARTCC.	Delete
c through **i**	Re-letter **b** through **h**

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1. PARAGRAPH NUMBER AND TITLE: 3-5-3. PROCESSING GPS ANOMALY REPORTS

2. BACKGROUND: Due to a re-organization of Technical Operations in the National Airspace System (NAS), the facilities responsible for processing GPS anomaly reports has changed. In reviewing FAA Order JO 7210.3, Facility Operation and Administration, there are references to Technical Operations facilities that no longer have the responsibility of handling GPS anomaly reports.

3. CHANGE:

OLD	NEW
3-5-3. PROCESSING GPS ANOMALY REPORTS	**3-5-3. PROCESSING GPS ANOMALY REPORTS**
Forward all information gathered as per FAAO JO 7110.65, Air Traffic Control, subpara 2-1-10b, through the TMU to the ATCSCC and the local MCC.	**Forward all information gathered as per FAA Order JO 7110.65, Air Traffic Control, 2–1–10, Paragraph b., NAVAID MALFUNCTIONS, through the TMU to the ATCSCC, and the appropriate Operations Control Center (OCC) or Service Operations Center (SOC).**
NOTE– *The NMCC in Warrenton, Virginia is the focal point for upward reporting and response coordination for all GPS anomalies.*	***NOTE–*** ***The WAAS Operations-East Desk at the ATCSCC in Warrenton, Virginia is the national focal point for reporting and response coordination for all GPS anomalies.***

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1. PARAGRAPH NUMBER AND TITLE: 3-6-2. RADAR USE

2. BACKGROUND: FAA Order JO 7110.310, Automatic Dependent Surveillance-Broadcast (ADS-B) Air Traffic Control (ATC) Services at Air Route Traffic Control Centers (ARTCCs) Using En Route Automation Modernization (ERAM), and JO 7110.313, Wide Area Multilateration (WAM) Air Traffic Control (ATC) Services at Air Route Traffic Control Centers (ARTCCs), approved ADS-B and WAM surveillance information for use in the En Route domain as a surveillance source. Safety analyses have been completed that support the use of ADS-B and WAM targets in all areas with or without existing radar coverage.

3. CHANGE:

OLD	NEW
3-6-2. RADAR USE	**3-6-2. ATC SURVEILLANCE SOURCE USE**
a. Approved radar systems may be used for:	**a. Surveillance sources that are approved for ATC use are Primary Radar, Secondary Radar, ADS-B and WAM. Approved ATC Surveillance Sources** may be used for:
a1 through **a7**	No Change

b. Approved terminal radar systems may also be used for:	**b.** Approved terminal **ATC Surveillance Sources** may also be used for:
b1 through ***NOTE***	No Change
Add	**c. Targets derived from ADS-B or WAM may not be used to provide 3 mile separation in the Enroute Automation System (EAS).**

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1. PARAGRAPH NUMBER AND TITLE: 3-9-1. COLOR USE ON ATC DISPLAYS

2. BACKGROUND: In transitioning from CARTS to STARS a conflict was discovered between the STARS System/Subsystem Specifications (SSS) and FAA Order JO 7210.3. The SSS requirement is for Tower Display Workstation (TDW) maps and emergency TRACON maps to be yellow. The current guidance in FAA Order JO 7210.3 requires all maps, except for the background map, to be dim gray.

3. CHANGE:

OLD	NEW
3-9-1. COLOR USE ON ATC DISPLAYS	**3-9-1. COLOR USE ON ATC DISPLAYS**
Title through **a2**	No Change
3. Compass Rose, range rings, maps A and B must be dim gray.	**3.** Compass Rose **and** range rings **must be dim gray. M**aps A and B must be dim gray **or yellow.**

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1. PARAGRAPH NUMBER AND TITLE: 4-2-2. PILOT EDUCATION

2. BACKGROUND: FAA Order JO 7210.3, Facility Operation and Administration, defines procedures used to obtain direction for FAA facilities. It provides regulations and procedures for the operations of these facilities. Flight Service Stations (FSS) have participated in facility–sponsored pilot/controller forums and/or participated with Flight Standards District Offices (FSDO) to aggressively educate pilots regarding operational matters. During an FAA order revalidation exercise, the Flight Services Safety and Operations Office determined that FSSs no longer participated in FAA Order 7230.17, Pilot Education - Operation Takeoff activities. Facility–sponsored pilot/controller forums and FSDO accident prevention safety meetings adequately addressed the pilot education training conducted by FSSs.

3. CHANGE:

OLD	NEW
4-2-2. PILOT EDUCATION	**4-2-2. PILOT EDUCATION**
Title through **a**	No Change
b. Operation Takeoff	Delete
REFERENCE– *FAAO 7230.17, Pilot Education Program – Operation Takeoff.*	Delete
c and **d**	Re–Letter **b** and **c**

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1. PARAGRAPH NUMBER AND TITLE: 4-6-4. FAA FORM 7230−4, DAILY RECORD OF FACILITY OPERATION

2. BACKGROUND: The FAA Contract Tower (FCT) Program Office, in cooperation with the ATC Vendors, began implementation of the FAA's Comprehensive Electronic Data Analysis and Reporting System (CEDAR) into FCTs in January 2014. The FAA upgraded all of the mission support computers with the Windows 7 operating system. Windows 7 was incompatible with the online versions of FAA Form 7230-4, Daily Record of Operation. All facilities which had adequate telecommunications capability were required to begin using the CEDAR−based FAA Form 7230-4.

3. CHANGE:

OLD	NEW
4-6-4. FAA FORM 7230−4, DAILY RECORD OF FACILITY OPERATION	**4-6-4. FAA FORM 7230−4, DAILY RECORD OF FACILITY OPERATION**
a	No Change
1. Each air traffic facility, excluding Federal contract towers (FCT) and FAA flight service stations, must use the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230−4.	**1.** Each air traffic facility, **where FAA telecommunications network capability exists** (excluding FAA flight service stations), must use the Comprehensive Electronic Data Analysis and Reporting (CEDAR) program to complete an automated version of FAA Form 7230−4.

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1. PARAGRAPH NUMBER AND TITLE: 5-3-8. FOREIGN STATE DIPLOMATIC FLIGHTS

2. BACKGROUND: Questions from the field are frequently received regarding foreign state aircraft with diplomatic clearances. These questions arise because there has previously been a lack of information available regarding such flights. This DCP adds a new paragraph to FAA Order JO 7210.3, Facility Operation and Administration, that provides the field with background and contact information regarding foreign state aircraft with diplomatic clearances.

3. CHANGE:

OLD	NEW
Add	**5-3-8. FOREIGN STATE DIPLOMATIC FLIGHTS**
Add	**Diplomatic clearances that authorize foreign state aircraft (military or non−military) to operate in U.S. territorial airspace for a specific time and purpose are approved by the U.S. State Department. Except for Open Skies Treaty priority flights, foreign state diplomatic flights are non−priority. Contact the FAA System Operations Support Center (SOSC) (202−267−8276 or email 9−ATOR−HQ−RT−REQ@faa.gov) with questions or issues concerning foreign state diplomatic flights.**

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1. PARAGRAPH NUMBER AND TITLE:
6-1-7. DISPLAY OF TRAFFIC MANAGEMENT ADVISOR (TMA) INFORMATION
17-6-4. TYPES OF TMIs

2. BACKGROUND: Traffic Management Advisor (TMA) was known as a comprehensive, automated method of planning efficient arrival trajectories from cruise altitude to the runway threshold. It increased situational awareness through its graphical displays, timelines, and load graphs. TMA trajectories have been optimized for each aircraft to permit an accurate estimated time of arrival at an airport and provide scheduled times of arrival (meter times) that optimize the flow of traffic into a terminal area. The next generation of TMA has begun. In this generation all references to TMA have been changed, now referencing its new name: Time-Based Flow Management (TBFM).

3. CHANGE:

OLD	NEW
6-1-7. DISPLAY OF TRAFFIC MANAGEMENT ADVISOR (TMA) INFORMATION	**6-1-7. DISPLAY OF TIME BASED FLOW MANAGEMENT (TBFM) INFORMATION**
Configure TMA delay information for single−center metering (SCM) or adjacent−center metering (ACM) to display TMA schedule information on the main display monitor (MDM).	Configure **TBFM** delay information for single−center metering (SCM) or adjacent−center metering (ACM) to display **TBFM** schedule information on the main display monitor (MDM).

OLD	NEW
17-6-4. TYPES OF TMIs	**17-6-4. TYPES OF TMIs**
Title through **f3**	No Change
4. Center TRACON Automation System Traffic Management Advisor (CTAS−TMA) − Assigns meter fix/arc crossing times to aircraft to manage airport arrival demand.	**4. Time-Based Metering (TBM). The action of personnel providing air traffic services to meet a scheduled time at which airborne aircraft should cross a metering point or arc.**

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1. PARAGRAPH NUMBER AND TITLE: 6-2-1. EN ROUTE CONTROLLER TEAM CONCEPT

2. BACKGROUND: In keeping with the ATO positive safety culture, several changes are being made to sections in this Order and in FAA Order JO 7110.65, Air Traffic Control, to shift away from allusions to "blame" and remove terms such as "operational error/deviation." This change also clarifies the same concept may be applied to en route or oceanic controller teams.

3. CHANGE:

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

a. 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.	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.
b. The intent of the team concept is not to hold the team accountable for the action of individual members in the event of an operational error/deviation.	Delete

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1. PARAGRAPH NUMBER AND TITLE: 6-6-5. MESSAGE CONTENT

2. BACKGROUND: The International Civil Aviation Organization (ICAO) formulates aircraft type designators for the world's aircraft that will most likely receive air traffic services. ICAO provides this information through ICAO Document 8643, Aircraft Type Designators, which is updated at least annually. FAA supplements the ICAO information and publishes it through two documents: FAA Order JO 7340.2, Contractions, and FAA Order 7110.65, Air Traffic Control. These FAA documents didn't contain all the aircraft listed by ICAO and the FAA documents contained dissimilar information.

3. CHANGE:

OLD	NEW
6-6-5. MESSAGE CONTENT	**6-6-5. MESSAGE CONTENT**
Title through **h1**	No Change
2. Type of Aircraft: This element is mandatory and contains two to four characters consisting of the authorized aircraft designator as contained in the FAAO JO 7340.2, Contractions.	**2.** Type of Aircraft: This element is mandatory and contains the **standard** aircraft **type** designator, **in accordance with** FAA O**rder** JO **7360.1, Aircraft Type Designators.**

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1. PARAGRAPH NUMBER AND TITLE: 10-1-2. TOWER/RADAR TEAM CONCEPTS

2. BACKGROUND: In keeping with the ATO positive safety culture, several changes are being made to sections in this Order and in JO 7110.65, Air Traffic Control, to shift away from allusions to "blame" and remove terms such as "operational error/deviation."

3. CHANGE:

OLD	NEW
10-1-2. TOWER/RADAR TEAM CONCEPTS	**10-1-2. TOWER/RADAR TEAM CONCEPTS**

a. 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 tower cab/facility/sector. The team, as a whole, has the responsibility for the safe and efficient operation of the tower cab/facility/sector.	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 tower cab/facility/sector. The team, as a whole, has the responsibility for the safe and efficient operation of the tower cab/facility/sector.
b. The intent of the team concept is not to hold the team accountable for the action of individual members in the event of an operational error/deviation.	Delete

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1. PARAGRAPH NUMBER AND TITLE:
10-1-7. USE OF ACTIVE RUNWAYS
10-1-8. PROCEDURES FOR OPENING AND CLOSING RUNWAYS

2. BACKGROUND: Air Traffic Safety Action Program (ATSAP) reports, Root Cause Analysis Team (RCAT) reviews, and numerous other reporting sources have indicated a lack of ineffective or inconsistent use of memory aids in air traffic control. Causal factors identified include: inconsistent guidance regarding operational use of memory aids, the lack of a national standard for operational use of memory aids, and controller complacency. As part of the ATO TOP 5 Hazards for FY15, the FAA sought to address the resulting issues by revising the 7210.3 to mandate the use of certain memory aids in the NAS.

3. CHANGE:

OLD	NEW
10-1-7. USE OF ACTIVE RUNWAYS	**10-1-7. USE OF ACTIVE RUNWAYS**
a. Facility air traffic managers shall issue a facility directive containing procedures to ensure the efficient use of runways, positive control and coordination of aircraft/vehicles on or near active runways. Authorization for aircraft/vehicles to taxi/proceed on or along an active runway, for purposes other than crossing, shall be provided via direct communications on the appropriate local control frequency. This authorization may be provided on the ground control frequency after coordination with local control is completed for those operations specifically described in a facility directive. In addition, a facility directive shall include procedures for the use of a memory aid for appropriate operational positions. This memory aid shall visually and/or aurally indicate that an aircraft/vehicle/pedestrian is on or near an active runway. Where memory aids for runway use have been established, their use shall be mandatory. Where memory aids are not in place, utilize collaborative effort, and develop and implement site-specific memory aids and procedures outlining their use.	**a.** Facility air traffic managers **must** issue a facility directive containing procedures to ensure the efficient use of runways, positive control and coordination of aircraft/vehicles on or near active runways. Authorization for aircraft/vehicles to taxi/proceed on or along an active runway, for purposes other than crossing, **must** be provided via direct communications on the appropriate local control frequency. This authorization may be provided on the ground control frequency after coordination with local control is completed for those operations specifically described in a facility directive.

Add	**b. Facility air traffic managers must develop procedures to be included in a facility directive for the mandatory use of an approved memory aid at the appropriate operational position/s for:**
Add	**1. Runway status (CLOSED/INACTIVE)**
Add	**2. Runway crossing**
Add	**3. Vehicle, personnel or equipment on active runway/s**
Add	**4. Land and Hold Short Operations (LAHSO)**
Add	**5. Line Up and Wait (LUAW)**
Add	**6. Landing clearance**
Add	**c. Approved memory aids will be maintained in the Runway Safety Memory Aid Toolbox. The use of memory aids that are not maintained in the toolbox must be approved by Operations – Headquarters AJT-2 through the appropriate Service Area Director of Operations.**
Add	***NOTE–*** ***Director approved memory aids must be coordinated with Runway Safety for inclusion in the memory aid toolbox.***
b through **e**	Re-letter **d** through **g**

OLD	**NEW**
10-1-8. PROCEDURES FOR OPENING AND CLOSING RUNWAYS	**10-1-8. PROCEDURES FOR OPENING AND CLOSING RUNWAYS**
Title through **c**	No Change
d. Must ensure that a facility directive includes procedures for the use of a memory aid that visually and/or aurally indicates that the runway is closed. Where a memory aid for a closed runway has been established, its use must be mandatory. Where a memory aid for a closed runway is not in place, utilize collaborative efforts to develop and implement site-specific memory aid(s) and procedures outlining its use.	**d.** Must ensure that a facility directive includes procedures for the **mandatory** use of **an approved** memory aid that indicates the s**tatus of the** runway **(CLOSED/INACTIVE).**
NOTE– *When implementing these procedures, one should consider short-term versus long-term closures as well as planned versus unplanned processes.*	Delete
REFERENCE– *FAAO JO 7110.65, Para 3-3-1, Landing Area Condition* *FAAO JO 7110.65, Para 3-3-2, Closed/Unsafe Runway Information* *FAAO JO 7110.65, Para 4-7-12, Airport Conditions* *FAAO JO 7210.3, Para 4-7-3, System Impact Reports* *FAAO JO 7210.3, Para 17-5-13, Electronic System Impact Reports*	Delete
Add	**e. Must implement approved memory aids and develop procedures outlining their use.**

Add	***NOTE–*** ***When implementing these procedures, one should consider short-term versus long-term closures as well as planned versus unplanned processes.***
Add	***REFERENCE–*** ***FAAO JO 7110.65, Para 3-3-1, Landing Area Condition*** ***FAAO JO 7110.65, Para 3-3-2, Closed/Unsafe Runway Information*** ***FAAO JO 7110.65, Para 4-7-12, Airport Conditions*** ***FAAO JO 7210.3, Para 4-7-3, System Impact Reports*** ***FAAO JO 7210.3, Para 10-1-7, Use of Active Runways*** ***FAAO JO 7210.3, Para 17-5-13, Electronic System Impact Reports***

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1. PARAGRAPH NUMBER AND TITLE: 10-4-6. SIMULTANEOUS INDEPENDENT APPROACHES

2. BACKGROUND: The Technical Advisory Group, AJT-22, requested a change to Paragraph 10-4-6, Simultaneous Independent Approaches. The proposed change adds guidance to managers on where to send requests for glide slope outage contingency plan approvals.

3. CHANGE:

OLD	NEW
10-4-6. SIMULTANEOUS INDEPENDENT APPROACHES	**10-4-6. SIMULTANEOUS INDEPENDENT APPROACHES**
Title through **c**	No Change
d. During glide slope outages, facilities may continue to conduct simultaneous independent approaches without vertical guidance for a period of no more than 29 days, provided the following requirements are identified in an Air Traffic Safety Oversight Service (AOV) approved contingency plan. At a minimum, the following special provisions, conditions, and limitations must be identified in the plan, if applicable, along with any other facility–specific requirements:	**d.** During glide slope outages, facilities may continue to conduct simultaneous independent approaches without vertical guidance for a period of no more than 29 days, provided the following requirements are identified in an Air Traffic Safety Oversight Service (AOV) approved contingency plan. **Submit glide slope outage contingency plans for approval to the Director, Operations–Headquarters for processing.** At a minimum, the following special provisions, conditions, and limitations must be identified in the plan, if applicable, along with any other facility–specific requirements:

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1. PARAGRAPH NUMBER AND TITLE: 10-4-7. SIMULTANEOUS WIDELY-SPACED PARALLEL OPERATIONS

2. BACKGROUND: The Flight Technologies and Procedures Division, AFS-400, removed the requirement to provide 1,000 feet vertical or 3 miles radar separation during turn on to widely−spaced parallel finals and substituted procedural design to allow simultaneous independent parallel operations between RNAV (RNP) approaches with RF legs and a RNAV (RNP) approaches with RF legs and certain other straight in approaches.

3. CHANGE:

OLD	NEW
10-4-7. SIMULTANEOUS WIDELY-SPACED PARALLEL OPERATIONS	**10-4-7. SIMULTANEOUS WIDELY-SPACED PARALLEL OPERATIONS**
Title through **d**	No Change
Add	**e. Facility ATMs must ensure authorized approach pairings, when one or both of the aircraft are conducting an RNAV (RNP) approach with RF legs, are identified in a Facility Directive and a Letter of Agreement (LOA), if applicable.**
Add	***REFERENCE–*** ***FAAO JO 7110.65, Paragraph 5-9-10, Simultaneous Independent Approaches to Widely-Spaced Parallel Runways Without Final Monitors***

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1. PARAGRAPH NUMBER AND TITLE: Chapter 11, Section 4. TPX-42

2. BACKGROUND: In FAA Notice N7110.683, dated January 29, 2015, all mention of TPX-42 and related terms were removed from the 7110.65 with the military's concurrence due to its obsolescence. It was recently discovered that the 7210.3 contains a section on TPX-42 and needs to be removed as well.

3. CHANGE:

OLD	NEW
11-4-1. OPERATIONAL USE	Delete
a. Do not use TPX−42 data when the system is released to Technical Operations technicians.	Delete
b. Verify the operational status of the TPX−42 prior to operational use.	Delete
c. Inform affected facilities of scheduled and unscheduled shutdowns.	Delete
d. Develop local procedures, operating instructions, and training materials required to ensure intrafacility standardization of operation.	Delete
e. Facility directives must specify the discrete codes assigned to each operating position from the code subsets allocated to the facility.	Delete
f. Traffic entering the terminal airspace on an ARTCC computer−assigned discrete beacon code must not remain on that code any longer than the time specified in a LOA.	Delete

NOTE– *Center computer parameters are adjusted to minimize the time in which a discrete code is assigned to an aircraft. The time specified in the letter of agreement should not exceed the Arrival Flight Plan Drop Interval adapted for your airport.*	Delete
11-4-2. LOW ALTITUDE ALERT SYSTEM (LAAS)	Delete
a. When continued use would adversely impact operational priorities, air traffic managers may temporarily inhibit the LAAS. Except when equipment or site adaptation problems preclude the use of LAAS, a brief written report must be sent to the respective Terminal Operations Service Area Office whenever it is inhibited. A copy of the report must be sent to System Operations and Safety, System Safety and Procedures.	Delete
b. Air traffic managers are authorized to inhibit LAAS at specific operating positions if an operational advantage will be realized.	Delete
c. Sector/altitude maps must be kept current.	Delete
d. Terminal Operations Service Area Offices must:	Delete
1. Furnish LAAS facilities a copy of:	Delete
(a) Newly received FAA Form 7460–2, Notice of Actual Construction or Alteration.	Delete
(b) Emergency Notices of Construction of structures more than 200 feet above ground level lying within 60 NM of the radar site.	Delete
2. Ensure that the daily National Flight Data Digest is provided to LAAS facilities when it affects their area of jurisdiction.	Delete
e. Facility managers must ensure that:	Delete
1. The material described in subpara d1 above, is reviewed, and that the appropriate corrections to the sector/altitude map are made.	Delete
2. The magnetic variation of the facility's sector/altitude map coincides with the magnetic variation of the facility's radar video maps/geo maps.	Delete
NOTE– *The sector/altitude map is constructed to align with the radar antenna offset for magnetic north. Consequently, any change in antenna offset will result in a corresponding change in the relative position of the terrain points and the obstacles used to determine altitude assignments. This will require generating a new sector/altitude map.*	Delete
11–5 through **11–10**	Renumber **11–4** through **11–9**

1. PARAGRAPH NUMBER AND TITLE: 11-9-1. SYSTEM OPERATION

2. BACKGROUND: Construction projects in the vicinity of runways may cause nuisance or false alerts. To mitigate alerts, facilities must coordinate with National Airway Systems Engineering (NAS Engineering) 30 to 45 days before construction is scheduled for assistance with map adaptation. An ASDE-X software enhancement, known as "Inhibit Area," provides facilities with the ability to modify surface area maps rather than request assistance from NAS Engineering. This feature is being deployed through a waterfall implementation and is already in use at a number of facilities.

3. CHANGE:

OLD	NEW
11-9-1. SYSTEM OPERATION	**11-8-1. SYSTEM OPERATION**
Title through **e**	No Change
f. Construction projects in the vicinity of runways may cause nuisance or false alerts. The National Airway Systems Engineering (NASE) group may be able to provide an adaptation to filter the affected areas from safety logic system coverage. Facilities must contact NASE via email at 9–AMC–ATOW–ASDES@faa.gov, 30 to 45 days before the construction is scheduled to begin to assist in deciding if an adaptation is necessary.	**f.** Construction projects in the vicinity of runways may cause nuisance or false alerts. **It is the responsibility of air traffic facility management to mitigate alerts.**
Add	**1. Air traffic facilities must use the ASDE-X "Inhibit Area" map feature to manage construction related alerts when possible.**
Add	**2. National Airway Systems Engineering (NAS Engineering) is able to assist facilities that do not have access to the ASDE-X "Inhibit Area" map feature to manage construction related alerts. Facilities must contact NAS Engineering for assistance 30 to 45 days before construction via email at 9–AMC–ATOW–ASDES@faa.gov.**
Add	**g. Changes to the airport movement areas which require updated ASDE-X Maps can be provided by NAS Engineering. Facilities must contact NAS Engineering for assistance 30 to 45 days before construction via email at 9–AMC–ATOW–ASDES@faa.gov.**
g through **h**	Renumber **h** through **i**

1. PARAGRAPH NUMBER AND TITLE:
11-10-3. CRITERIA
11-10-4. RESPONSIBILITIES

2. BACKGROUND: The Airport Facility Directory will no longer be publishing VFR Waypoints. The removal of this section was coordinated through the Aeronautical Charting Forum. VFR Waypoints will only be found on VFR Sectionals, Terminal Area Charts, and Flyway Charts. We have now provided new guidance to review FAA Order 7350.9, Location Identifiers, as it also contains a listing of VFR waypoints. During review of the paragraph, it was found to contain many references to obsolete offices. The offices and their process were updated to current terminology.

3. CHANGE:

OLD	NEW
11-10-3. CRITERIA	**11-9-3. CRITERIA**
Title through **a4**	No Change
5. VFR waypoints are not for use in ATC communications; therefore, the VFR waypoint names are not pronounceable. If it is desired that a VFR waypoint be used for communications, then a new VFR checkpoint must be established. VFR checkpoints can be established by submitting a letter to System Operations Airspace and Aeronautical Information Management, describing the checkpoint and providing the latitude/longitude location.	**5.** VFR waypoints are not for use in ATC communications; therefore, the VFR waypoint names are not pronounceable. If it is desired that a VFR waypoint be used for communications, then a new VFR checkpoint must be established. VFR checkpoints can be established by submitting a **request** to Aeronautical Information **Services**, **through the Service Area Operations Support Group (OSG)** describing the checkpoint and providing the latitude/longitude location.
a6 through **b3**	No Change
4. The latitude/longitude for each waypoint will be published in the Airport/Facility Directory (A/FD) and on one of the panels of the appropriate chart.	**4.** The latitude/longitude for each waypoint will be published in **FAA Order JO 7350.9, Location Identifiers,** and on one of the panels of the appropriate chart.

OLD	NEW
11-10-4. RESPONSIBILITIES	**11-9-4. RESPONSIBILITIES**
Title through **b1** ***NOTE***	No Change
2. After consensus with all affected air traffic facilities and local aviation interests on the need and location of the proposed VFR waypoints, submit a package to the respective Terminal Operations Area Office containing:	**2.** After consensus with all affected air traffic facilities and local aviation interests on the need and location of the proposed VFR waypoints, submit a package to the respective **Service Area OSG** containing:
2(a)	No Change
(b) A completed FAA Form 8260–2, Radio Fix and Holding Data Record, in accordance with FAAO 8260.19, Flight Procedures and Airspace. A list of VFR waypoint fiveletter names can be obtained from the Terminal Operations Service Area offices obtain fiveletter names from System Operations Airspace and Aeronautical Information Management. Flight checks are not required.	**(b)** A completed **Appendix D,** FAA Form 8260–2, **Data Worksheet**, in accordance with FAAO 8260.19, Flight Procedures and Airspace. A list of **available** VFR waypoint five–letter names can be obtained from the **Service Area OSG or from Aeronautical Information Services, National Flight Data Center**. Flight checks are not required.

(c) A camera−ready textual description of each waypoint including the name. Contact the Terminal Operations Area Office for assistance in preparing this document.

(d) A 7 ½−minute quadrangle chart or obstruction evaluation (OE)/airport airspace analysis (AAA) Geographical Information System (GIS) graphics with the precise point of the VFR waypoint depicted. It is critical that the depictions be easily readable by the Technical Operations Aviation Systems Standards, National Aeronautical Charting office, in order to verify the position for accurate charting. If using OE/AAA GIS graphics, provide the applicable 7 ½ −minute quadrangle map names. Contact the Terminal Operations Area Office for assistance in preparing this chart.

2e

c. The Terminal Operations Area Office must:

1. Provide assistance to the air traffic facility, when requested, to prepare the camera−ready textual description of each waypoint including the name−and/or to depict the VFR waypoints on a 7 ½−minute quadrangle chart.

2. Approve the VFR waypoint charting and ensure compliance with the prescribed criteria. If approval is granted, the Terminal Operations Area Office must forward the package to System Operations Airspace and Aeronautical Information Management at least 12 weeks prior to the planned implementation date. The planned implementation date must coincide with a publication date of the respective VFR navigation chart.

c3 through **c5**

d. System Operations Airspace and Aeronautical Information Management must:

d1 through **d2**

3. Forward the package to National Aeronautical Charting for verification of the geographic positions.

4. Upon verification, National Aeronautical Charting must notify System Operations Airspace and Aeronautical Information Management prior to publication in the National Flight Data Digest (NFDD).

d5

Add

e. National Aeronautical Charting must:

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

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

No Change

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

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

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

No Change

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

No Change

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

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

No Change

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

e. Visual Charting **Team** must:

e1	No Change
2. Coordinate with System Operations Airspace and Aeronautical Information Management for the resolution of any geographic positions that require FAA Form 8260−2 revisions; provide System Operations Airspace and Aeronautical Information Management with verification that geographic positions are ready for publication in the NFDD.	**2.** Coordinate with **the National Flight Data Center** for the resolution of any geographic positions that require FAA Form 8260−2 revisions; provide **the National Flight Data Center** with verification that geographic positions are ready for publication in the NFDD.
3. Coordinate with System Operations Airspace and Aeronautical Information Management to ensure that any new or revised VFR checkpoints are published in the NFDD.	**3.** Coordinate with **the National Flight Data Center** to ensure that any new or revised VFR checkpoints are published in the NFDD.
e4	No Change

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1. PARAGRAPH NUMBER AND TITLE:
17-25-1. PURPOSE
17-25-2. DEFINITIONS
17-25-3. RESPONSIBILITIES
17-25-4. DEFINITIONS
17-25-5. RESPONSIBILITIES

2. BACKGROUND: Traffic Management Advisor (TMA) was known as a comprehensive, automated method of planning efficient arrival trajectories from cruise altitude to the runway threshold. It increased situational awareness through its graphical displays, timelines, and load graphs. TMA trajectories have been optimized for each aircraft to permit an accurate estimated time of arrival at an airport and provide scheduled times of arrival (meter times) that optimize the flow of traffic into a terminal area. The next generation of TMA has begun. In this generation all references to TMA have been changed, now referencing its new name: Time-Based Flow Management (TBFM).

3. CHANGE:

OLD	**NEW**
Section 25. Traffic Management Advisor (TMA)	**Section 25. Time−Based Flow Management (TBFM)**
Add	**17-25-1. GENERAL**

Add	**a. TBFM is the hardware, software, methods, processes, and initiatives to manage air traffic flows based on time to balance air traffic demand with system capacity, and support the management of Performance Based Navigation (PBN).**
Add	**b. TBFM provides a dynamic timed based environment, which increases efficiency and minimizes delays, compared to the use of static miles-in-trail. TBFM is a comprehensive, automated method of departure scheduling, en route adjustments, and arrival management. TBFM increases situational awareness through its graphical displays, timelines, and load graphs. TBFM trajectories are optimized for each aircraft to permit an accurate estimated time of arrival at an airport and provide scheduled times of arrival (meter times) that optimize the flow of traffic into a terminal area by adding more predictability to the ATC system. TBFM enables the routine use of Performance Based Operations (PBO).**

OLD	NEW
17-25-1. PURPOSE	**17-25-2. PURPOSE**
This section establishes procedures and responsibilities for the use of Traffic Management Advisor (TMA).	**a.** This section establishes the purpose of **TBFM.**
Add	**b. TBFM is the expanded use of time based metering to enable gate-to-gate improvements in both fuel and throughput efficiencies by:**
Add	**1. Applying spacing only where needed.**
Add	**2. Allowing for the routine use of PBO.**
Add	**3. Capitalizing on advanced aircraft Flight Management System (FMS) capabilities.**
Add	**4. Adding more predictability to the ATC system.**

OLD	NEW
Add	**17-25-3. POLICY**

Add	**When departure and or arrival flows are subject to TMIs, or when supporting PBN procedures, TBFM must be used to the maximum extent feasible in preference to miles-in-trail initiatives. Procedures for use of the capabilities within TBFM, in support of PBN operations and TMIs, must be documented in facility directives.**
Add	***NOTE–*** ***The benefits of TBFM are best realized through the coordinated effort of all facilities supporting PBN procedures or TMIs.***

OLD	NEW
17-25-2. DEFINITIONS	**17-25-4. DEFINITIONS**
a. Adjacent Center Metering (ACM). An extension of SCM that provides time-based metering capability to neighboring facilities. There are three categories of ACM processing and control at a facility:	**a.** Adjacent Center Metering (ACM). An extension of **Single Center Metering (SCM)** that provides time-based metering capability to neighboring facilities. There are three categories of ACM processing and control at a facility:
1. Controlling facility – The TMA unit that exercises control over SCM and/or ACM settings and the relevant metering operation.	**1. Managing** Facility **(Full Control Graphic User Interface (GUI))** – **That facility which** exercises control over SCM and/or ACM settings and the relevant metering operation.
2. Limited Control - The ability to manage specific ACM settings and activities for relevant metering operations.	**2.** Limited Control **(Partial Control GUI)** - The ability to manage specific ACM settings and activities for relevant metering operations.
3. Non-Controlling - A facility that only has monitoring capability.	**3.** Non-Controlling **(Non-Control GUI)** - A facility that only has monitoring capability.
Add	**b. Constraint Satisfaction Point (CSP) – A meter arc, meter fix, meter point or other meter reference elements.**
b. Coupled Scheduling. An automation process that adds additional meter-points and allows the linking of time-based flow management (TBFM) systems. This results in more optimal balancing and distribution of delays over a greater distance from the airport or meter point.	**c.** Coupled Scheduling. **Adds additional CSPs for an aircraft to meet the scheduled time of arrival along their route**. This results in more optimal balancing and distribution of delays over a greater distance from the airport or **CSP.**
c. En Route Departure Capability (EDC). A functionality within TMA that assists TMCs in formulating release times to adapted meter points in space.	**d.** En Route Departure Capability (EDC). **Scheduling capability that assists personnel providing traffic management services in formulating release times to a CSP to manage a mile-in-trail restrictions.**
d. Metering. A method of controlling aircraft demand by scheduling the time at which each aircraft should cross a predetermined fix.	Delete
Add	**e. Extended Metering. Adds additional CSPs for an aircraft to meet the scheduled time of arrival along their route. This results in more optimal balancing and distribution of delays over a greater distance from the airport or CSP.**

Add	**f. Ground-Interval Management-Spacing (GIM-S). Capability that provides automated speed advisories prior to descent to enable en route controllers to meet the Scheduled Time of Arrival (STA).**
Add	**g. Integrated Departure/Arrival Capability (IDAC). Capability that automates the Call for Release process for departure scheduling and EDC.**
e. Rippling. The recalculation of TMA'generated, frozen scheduled times of arrival (STA) resulting from a manual action at the controlling graphical user interface (GUI). Rippling, also commonly referred to as "rescheduling" or "reshuffling," can be executed independently but is normally associated with changes to TMA configurations or settings.	**h. Reschedule/Global Reschedule – The recalculation of generated frozen scheduled times of arrival (STA) resulting from an action taken at the TBFM GUI. Reschedule/Global Reschedule also commonly referred to as "rescheduling" or "rippling," can be executed as an independent function but is also accomplished when changes to TBFM configurations or settings occur.**
f. Single Center Metering (SCM). An application of the TMA tool that provides TMCs with the ability to view and manage arrival flows to an ARTCC's internal airports.	**i.** Single Center Metering (SCM). **Capability that provides personnel providing traffic management services** with the ability to view and manage arrival flows to an ARTCC's internal airports.
Add	**j. Supporting Facility. A facility, which maintains an ancillary relationship to the managing facility in supporting TBFM-related functions.**
g. Time-Based Flow Management (TBFM). The technology and methods of balancing demand and capacity utilizing time.	**k.** Time Based Flow Management (TBFM) **is the hardware, software, methods, processes, and initiatives to manage air traffic flows based on time to balance air traffic demand with system capacity, and support the management of PBN. This includes, but not limited to, TBM, ACM, SCM, EDC, TBS, IDAC, GIM-S, and Extended/Coupled Metering.**
h. Traffic Flow Management (TFM). The processes and initiatives a TMC uses to balance air traffic demand with system capacity.	Delete
i. Traffic Management Advisor (TMA). A comprehensive, automated method of planning efficient arrival trajectories from cruise altitude to the runway threshold.	Delete

Add	**l. Time-Based Metering (TBM). The action of personnel providing air traffic services to meet a scheduled time at which airborne aircraft should cross a CSP.**
Add	**m. Time-Based Scheduling (TBS)/Departure Scheduling. The action of personnel providing traffic management services to formulate time parameters for release of aircraft into an arrival flow.**

OLD	NEW
17-25-3. RESPONSIBILITIES	**17-25-5. RESPONSIBILITIES**
a. The ATCSCC must:	No Change
1. Be the final decision authority for TMA–related operations and initiatives.	**1.** Be the final decision authority for **TBFM** related operations and initiatives
a2	No Change
3. Host/participate in ACM discussions and support all ACM and other time-based metering initiatives. Collaborate on an exit strategy when ACM is no longer required.	**3. Maintain awareness of all TBFM-related operational activities within the NAS.**
4. Include the status of any pertinent TMA-related information on the planning telecons and on the Operational Information System (OIS).	**4.** Include the status of pertinent **TBFM** related information on the planning telecons and on the **National Airspace System Status display.**
5. Prioritize TBFM activity based on NAS and/or facility constraints.	**5.** Prioritize **day-to-day** TBFM activity based on NAS and/or facility constraints.
6. Inform impacted facilities of relevant information that would influence arrival metering decisions or en route EDC operations.	Delete
7. Establish and maintain multi-facility communications when necessary for ACM operations.	**6.** Establish and maintain multi-facility communications when necessary for **TBFM** operations.
8. Log ACM events and other TMA activities as appropriate in the NTML.	**7.** Log **TBFM related** activities.
9. Serve as a repository for TBFM information and TMA reference materials.	Delete
b. All TMUs with controlling TMA systems must:	**b. The Managing Facility must:**
1. Determine appropriate TMA settings.	**1.** Determine appropriate **TBFM settings and parameters.**
2. Ensure TMA settings are entered, current, and coordinated.	**2.** Ensure **TBFM** settings are entered **via TBFM TGUI, kept current, and coordination is accomplished.**
3. Monitor TMA to determine metering timeframes and coordinate start/stop times and reportable delays with the ATCSCC and affected facilities.	**3. Determine TBFM activity** timeframes and coordinate start/stop times with the ATCSCC and affected facilities.

4. Communicate meter start/stop information to operational areas, operating positions, and participating facilities, and enter into NTML as necessary.

4. Communicate **TBFM activity** start/stop information to operational areas, operating positions, and **supporting** facilities, and **log.**

5. Enable sector meter list as coordinated.

5. Enable/**Disable** sector meter list as coordinated**, where applicable.**

6. Monitor internal facility metering delays and initiate actions, as appropriate, when values exceed or are projected to exceed delays that can be absorbed by control sectors. Notify the FLM or affected areas/sectors of actions taken and expected outcomes.

6. Monitor **internal and upstream compliance and take appropriate action.**

7. Monitor multi-metering scenarios. Advise ATCSCC if time based metering (TBM) to multiple airports or fixes is impacting or projected to impact sector or facility level operations.

7. Monitor **TBFM airborne delays and initiate actions, as appropriate, when values exceed or are projected to exceed delays that can be absorbed by control sectors. Notify the FLM or affected areas/sectors of actions taken and expected outcomes.**

8. Coordinate changes to the metering plan or updates to the TMA schedule with the affected facilities.

8. Notify ATCSCC when unable to use TBFM capabilities, provide supporting justification, and log.

9. Coordinate internally with affected areas and with any ACM supporting facilities before taking action to update the TMA schedule.

9. Coordinate internally with affected areas and with supporting facilities before taking action **when changes to the metering strategy or updates to the TBFM** schedule **are necessary.**

Add

NOTE–
To the extent possible, avoid making any changes in TBFM that cause a reschedule/global reschedule during metering operations. Coordinate with affected facilities and sectors before a reschedule/global reschedule.

10. To the extent possible, avoid making any changes in TMA that cause a global schedule change (rippling) during metering operations. Advise affected facilities and sectors before rippling.

10. Ensure TBFM coordination procedures are placed into local SOP or LOAs between facilities.

Add

REFERENCE–
FAAO 7210.3, Para 4-3-1, LETTERS OF AGREEMENT

NOTE–
Coordinate and disable the sector meter list when rippling is necessary. Enable the metering list when rippling is complete.

Delete

11. Use TMA to determine release times for internal departures to a metered airport.

11. Use **TBFM** to determine release times for **facility controlled** departures to a metered airport.

12. Monitor arrival and departure flows for potential metering actions/changes.

12. Ensure TBFM adaptations are maintained to reflect current operations.

13. Monitor internal and adjacent facility metering compliance and take appropriate action.

13. Ensure trouble reports are submitted and reconciled.

14. Coordinate and disable sector meter list when metering times are no longer in effect.	**14. Ensure TBFM training is completed.**
Add	**15. Provide support to other local facilities with TBFM equipment.**
Add	**16. Coordinate with appropriate entities for TBFM related activities.**
c. Supporting TMUs performing ACM or coupled scheduling must:	**c.** Supporting **facilities (ARTCC/TRACON/ Tower)** must:
1. Determine appropriate local **TMA** settings.	**1.** Determine appropriate local **TBFM** settings.
2. Ensure TMA settings are entered, current, and coordinated.	**2.** Ensure **TBFM** settings are entered **via TBFM TGUI, kept** current, and **coordination is accomplished.**
3. Coordinate with controlling facility and ATCSCC, as appropriate.	**3. Determine TBFM activity** timeframes and coordinate start/stop times with the ATCSCC and affected facilities.
4. Communicate meter start/stop information to operational areas, operating positions, and participating facilities.	**4.** Communicate **TBFM activity** start/stop information to operational areas, operating positions, and **supporting** facilities, and **log.**
5. Enable sector meter list as coordinated.	**5.** Enable/**Disable** sector meter list as coordinated**, where applicable.**
6. Use TMA to determine release times for internal departures to a metered airport.	**6.** Use **TBFM** to determine release times for **facility controlled** departures to a metered airport.
c7	No Change
NOTE– *Coordinate and disable the sector meter list when rippling is necessary. Enable the metering list when rippling is complete.*	Delete
8. Monitor internal and upstream compliance.	**8. Notify managing facility when unable to use TBFM capabilities, provide supporting justification, and log.**
9. Disable the sector meter list when metering has been completed.	**9. Monitor internal and upstream compliance and take appropriate action.**
Add	**10. Ensure TBFM training is completed.**
Add	**11. Through the appropriate managing facility, supporting facilities must:**
Add	**(a) Ensure adaptations are maintained to reflect current operations.**
Add	**(b) Ensure trouble reports are submitted and reconciled.**
Add	**(c) Provide support to other local facilities with TBFM equipment.**

1. PARAGRAPH NUMBER AND TITLE:
18-1-8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE
18-5-1. MOORED BALLOONS, KITES, UNMANNED ROCKETS, AND UNMANNED FREE BALLOONS/OBJECTS

2. BACKGROUND: This amendment responds to NTSB recommendations outlined in a Special Investigative Report (SIR) 14/02, issued June 18, 2014, Parasailing Safety, that states (1) take appropriate action to ensure that directives are in harmony and consistently applied nationwide to reduce the risk of collisions. (A-14-065); and (2) to resolve conflicts between (a) the existing Federal Aviation Administration special provision that gives aircraft right-of-way over parasailing vessels, and (b) the existing international and inland navigation rules that imply that parasailing vessels are restricted in their ability to maneuver and, therefore, should have the right-of-way. (A-14-066) The changes contained herein provide guidance for integrating parasail operations into the NAS and sharing Certificates of Waiver or Authorization for parasail operations.

3. CHANGE:

OLD	NEW
18-1-8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE	**18-1-8. WAIVER, AUTHORIZATION OR DENIAL PROCEDURE**
Title through **b**	No Change
c. Washington Headquarters: Except for waivers or authorizations issued by Flight Standards Service, forward copies of waivers, authorizations or written denials to the Washington Headquarters, System Operations Airspace and Aeronautical Information Management.	**c.** Washington Headquarters: Except for waivers or authorizations issued by Flight Standards Service, forward copies of waivers, authorizations or written denials to the Washington Headquarters, **Airspace Policy and Regulations Group.**
d. Other Distribution: Other than as specified above and as necessary to satisfy Service Area office needs, distribution must be limited to those offices that have a need for the information.	**d.** Other Distribution: Other than as specified above and as necessary to satisfy Service Area office needs, distribution must be limited to those offices that have a need for the information. **For parasail operations covered under Paragraph 18-5-1, Service Area offices must distribute approved waivers or authorizations to the appropriate Flight Standards District Office.**

OLD	NEW
Section 5. Moored Balloons, Kites, Unmanned Rockets, and Unmanned Free Balloons/Objects	**Section 5. Moored Balloons, Kites, Parasails, Unmanned Rockets, and Unmanned Free Balloons/Objects**
18-5-1. MOORED BALLOONS, KITES, UNMANNED ROCKETS, AND UNMANNED FREE BALLOONS/OBJECTS	**18-5-1. MOORED BALLOONS, KITES, PARASAILS, UNMANNED ROCKETS, AND UNMANNED FREE BALLOONS/OBJECTS**
Apply the following guidelines to moored balloon, kite, unmanned rocket, or unmanned free balloon flights conducted in accordance with Part 101 of 14 CFR:	Apply the following guidelines to moored balloon, kite, **parasail,** unmanned rocket, or unmanned free balloon flights conducted in accordance with Part 101 of 14 CFR:
a	No Change
Add	**b. Facilities receiving parasail information must ensure that appropriate notices include the information required by 14 CFR Section 101.15.**
b through **d**	Re–Letter **c** through **e**

1. PARAGRAPH NUMBER AND TITLE:
19-1-8. TFR QUESTIONS
19-2-5. ISSUING TFRs
19-2-7. RESPONSIBILITIES
19-7-3. RESPONSIBILITIES
19-7-5. COORDINATION
19-7-6. SPECIAL TRAFFIC MANAGEMENT PROGRAM GUIDELINES
19-7-8. REVISIONS AND CANCELLATIONS

2. BACKGROUND: During a review and update of Advisory Circular (AC) 91-63C-Temporary Flight Restrictions (TFRs/TFR) editorial changes were identified impacting FAA Order JO 7210.3. These changes only affect Chapter 19, Temporary Flight Restrictions. The language modified is in reference to the "ATO service area manager."

3. CHANGE:

OLD

19-1-8. TFR QUESTIONS

Direct any questions or concerns regarding TFRs to the ATO service area manager having jurisdiction over the TFR area. You may also contact Mission Support, Airspace, Regulations, and ATC Procedures Group, FAA Headquarters, Washington, D.C., at (202) 267−8783.

NEW

19-1-8. TFR QUESTIONS

Direct any questions or concerns regarding TFRs to the ATO service area **director** having jurisdiction over the TFR area. You may also contact Mission Support, Airspace, Regulations, and ATC Procedures Group, FAA Headquarters, Washington, D.C., at (202) 267−8783.

OLD

19-2-5. ISSUING TFRS

a. FAA Headquarters or the ATO service area managers (or their designee) having jurisdiction over the area concerned may issue a TFR.

b. TFRs issued for hijacking events may be issued by FAA Headquarters or the ATO service area managers (or designee) with coordination through the Domestic Events Network (DEN) air traffic security coordinator (ATSC).

NEW

19-2-5. ISSUING TFRS

a. FAA Headquarters or the ATO service area **director** (or their designee) having jurisdiction over the area concerned may issue a TFR.

b. TFRs issued for hijacking events may be issued by FAA Headquarters or the ATO service area **director** (or designee) with coordination through the Domestic Events Network (DEN) air traffic security coordinator (ATSC).

OLD

19-2-7. RESPONSIBILITIES

Title through **b2**

c. ATO service area managers (or designee) must:

NEW

19-2-7. RESPONSIBILITIES

No Change

c. ATO service area director (or designee) must:

OLD

19-7-3. RESPONSIBILITIES

c. The regional ATO Service Area Managers (or their designee) is responsible for the grant or denial of Certificate of Waiver or Authorization (FAA Formc7711−1) for the following Sections/parts of 14 CFR:

NEW

19-7-3. RESPONSIBILITIES

c. The regional ATO Service Area **Director** (or their designee) is responsible for the grant or denial of Certificate of Waiver or Authorization (FAA Form 7711−1) for the following Sections/parts of 14 CFR:

c1 through **d6**	No Change
NOTE– *Applications for waiver or authorization that require both Air Traffic and Flight Standards technical considerations must be handled jointly. Additionally, a copy of all such waivers must be sent to the affected ATC facility(s) having control jurisdiction over the affected airspace and the regional (530) manager. Requests for a TFR, waiver, or authorization for an aviation event requires coordination with the appropriate ATC facility and the regional ATO Service Area Managers.*	***NOTE–*** *Applications for waiver or authorization that require both Air Traffic and Flight Standards technical considerations must be handled jointly. Additionally, a copy of all such waivers must be sent to the affected ATC facility(s) having control jurisdiction over the affected airspace and the regional (530) manager. Requests for a TFR, waiver, or authorization for an aviation event requires coordination with the appropriate ATC facility and the regional ATO Service Area **Director.***

OLD	**NEW**
19-7-5. COORDINATION	**19-7-5. COORDINATION**
Title through **a6**	No Change
b	No Change
1. Requests for sporting event restrictions must be forwarded to the appropriate regional ATO Service Area Managers for action.	**1.** Requests for sporting event restrictions must be forwarded to the appropriate regional ATO Service Area **Director** for action.
2. The regional ATO Service Area Managers will review the request, and if it meets the criteria in accordance with 14 CFR Section 91.145, forward the their recommendation and all applicable information (including the signed, written request from the originator) to the Airspace and Rules Manager at least 30-days prior to the event.	**2.** The regional ATO Service Area **Director** will review the request, and if it meets the criteria in accordance with 14 CFR Section 91.145, forward the their recommendation and all applicable information (including the signed, written request from the originator) to the Airspace and Rules Manager at least 30–days prior to the event.
3. If the TFR is not approved as requested, the Airspace and Rules Manager must inform the regional ATO Service Area Managers, indicating the basis for the disapproval. The regional ATO Service Area Managers must inform the requestor of the disapproval and any available alternatives.	**3.** If the TFR is not approved as requested, the Airspace and Rules Manager must inform the regional ATO Service Area **Director**, indicating the basis for the disapproval. The regional ATO Service Area **Director** must inform the requestor of the disapproval and any available alternatives.
c. Aerial Demonstrations. Any request for a TFR, waiver, or authorization for an aviation event requires coordination with the appropriate ATC facility and the regional ATO Service Area Managers at least 90 days prior to the event.	**c.** Aerial Demonstrations. Any request for a TFR, waiver, or authorization for an aviation event requires coordination with the appropriate ATC facility and the regional ATO Service Area **Director** at least 90 days prior to the event.
c1	No Change
2. The ATC facility coordinates the request with the regional ATO Service Area Managers.	**2.** The ATC facility coordinates the request with the regional ATO Service Area **Director.**
3. The regional ATO Service Area Managers will review the request, and if it meets the criteria in accordance with 14 CFR Section 91.145, forward their recommendation and all applicable information (including the signed, written request from the originator) to the Airspace and Rules Manager at least 30–days prior to the event.	**3.** The regional ATO Service Area **Director** will review the request, and if it meets the criteria in accordance with 14 CFR Section 91.145, forward their recommendation and all applicable information (including the signed, written request from the originator) to the Airspace and Rules Manager at least 30–days prior to the event.

c4

5. If the TFR is not approved as requested, the Airspace and Rules Manager must inform the regional ATO Service Area Managers, indicating the basis for the disapproval. The Regional ATO Service Area Managers must inform the requestor of the disapproval and any available alternatives.

OLD

19-7-6. SPECIAL TRAFFIC MANAGEMENT PROGRAM GUIDELINES

Each regional ATO Service Area Manager is responsible for the drafting of special traffic management plans for the management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. Accordingly, the ATO Service Area Managers, in concert with the affected facility personnel, must:

OLD

19-7-8. REVISIONS AND CANCELLATIONS

a. When restrictions are necessary beyond the published termination date/time, the regional ATO Service Area Managers must advise the Airspace and Rules Manager to ensure that a revised NOTAM and an appropriate cancellation are issued.

b. When it is obvious that the restrictions are no longer required, but no information to that effect has been received, the regional ATO Service Area Managers must take action to ascertain the status of the restrictions from the agency/person that requested the restrictions.

c

1. One to the ATO Service Area Managers, at least 45 days prior to the event.

c2

d. For a Major Sporting Event– Submit the TFR request to the ATO Service Area Managers at least 45 days in advance of the major sporting event. The ATO Service Area Managers will assess the need for a TFR and forward their recommendation to the Airspace and Rules Manager. The Airspace and Rules Manager will determine whether a TFR is necessary and issue the TFR accordingly.

No Change

5. If the TFR is not approved as requested, the Airspace and Rules Manager must inform the regional ATO Service Area **Director**, indicating the basis for the disapproval. The Regional ATO Service Area **Director** must inform the requestor of the disapproval and any available alternatives.

NEW

19-7-6. SPECIAL TRAFFIC MANAGEMENT PROGRAM GUIDELINES

Each regional ATO Service Area **Director** is responsible for the drafting of special traffic management plans for the management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. Accordingly, the ATO Service Area **Director**, in concert with the affected facility personnel, must:

NEW

19-7-8. REVISIONS AND CANCELLATIONS

a. When restrictions are necessary beyond the published termination date/time, the regional ATO Service Area **Director** must advise the Airspace and Rules Manager to ensure that a revised NOTAM and an appropriate cancellation are issued.

b. When it is obvious that the restrictions are no longer required, but no information to that effect has been received, the regional ATO Service Area **Director** must take action to ascertain the status of the restrictions from the agency/person that requested the restrictions.

No Change

1. One to the ATO Service Area **Director**, at least 45 days prior to the event.

No Change

d. For a Major Sporting Event– Submit the TFR request to the ATO Service Area **Director** at least 45 days in advance of the major sporting event. The ATO Service Area **Director** will assess the need for a TFR and forward their recommendation to the Airspace and Rules Manager. The Airspace and Rules Manager will determine whether a TFR is necessary and issue the TFR accordingly.