

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

N JO 7210.706

Effective Date: February 1, 2009

Cancellation Date: January 31, 2010

SUBJ: En Route Automation Modernization (ERAM)

- Purpose of This Notice. This notice transmits editorial and content changes to air traffic procedural guidance in FAA Order (FAAO) 7210.3, Facility Operation and Administration related to the waterfall implementation and use of En Route Automation Modernization (ERAM). The guidance contained in this notice supersedes the applicable provisions of FAAO 7210.3 whenever a facility uses ERAM for operational air traffic control services. Facilities shall revert to the current provisions of FAAO 7210.3 during those periods that ERAM is not used operationally for air traffic control services.
- 2. Audience. This notice is intended for all air traffic personnel at facilities that use ERAM for operational air traffic control services.
- Where Can I Find This Notice? The notice is available on the MYFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications Web site at http://www.faa.gov/airports airtraffic/air traffic/publications.
- 4. Explanation of Policy Change. Whenever ERAM is used operationally for air traffic control services, the applicable provisions of FAAO 7210.3, Facility Operation and Administration, are superseded by the corresponding provisions contained in this notice. Applicable paragraphs contain changes that are both editorial and content in nature. Changes are considered editorial in nature if the only change involves the replacement of a reference to a Host legacy system with its ERAM equivalent with no other change to functions, requirements, or responsibilities. Examples are the replacement of the term "Host," or "NAS Stage A" with "ERAM" or the replacement of the term "URET" with "EDST" or "URET/EDST." Changes are considered content in nature if the changes involve a change to a function, requirement, or responsibility. See Appendix A, ERAM Changes to FAA Order 7210.3.
- 5. Action. Air traffic managers shall ensure that the provisions of this notice are briefed to operations managers, front-line managers, controllers-in-charge and air traffic controllers prior to the first use of ERAM for operational air traffic control services.
- 6. **Distribution**. This notice is distributed to Air Traffic Organization (ATO) En Route Safety and Operations Support, Mike Monroney Aeronautical Center, En Route and Oceanic Operations Service Areas, and all air route traffic control centers (ARTCCs), except Anchorage ARTCC.
- Background. Beginning on or about February 2009, the operational use of ERAM for air traffic control services will be implemented at all ARTCCs in the contiguous United States in accordance with a waterfall schedule. The transition from the Host automation system to ERAM is expected to be completed within approximately 18 months. During that transition period, the provisions of this notice will apply only during those times that a facility is using ERAM for operational air traffic control services. For those facilities that have not yet transitioned to ERAM, or for those ERAM facilities that

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for any reason, are not using ERAM operationally for air traffic control services, the existing provisions of FAAO 7210.3 shall apply. When all Host facilities have transitioned permanently to ERAM, the provisions of this notice shall be incorporated into a future change to FAAO 7210.3.

9. Safety Management System. Appropriate safety management documentation, in accordance with FAAO 1100.161, Air Traffic Safety Oversight, ATO Order 1000.37, Air Traffic Organization Safety Management System, and the ATO Safety Management System Manual, has been completed in support of this notice.

Luis A. Ramirez

Director of En Route and Oceanic Safety and Operations Support Air Traffic Organization Poostesti

Date Signed

APPENDIX A. ERAM Changes to FAA Order 7210.3

HOST

1-2-5. ABBREVIATIONS

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

New

New

ERAM

1-2-5. ABBREVIATIONS

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

EDST..... En Route Decision Support Tools

ERAM..... En Route Automation Modernization

No further changes to section

HOST

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

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

Cru-X/ART is the official time and attendance system for both signing in/out for a shift and on and off positions, not paper logs nor Common ARTS/HOST/NTML/M1FC or other Agency or local programs. Facilities may use Common ARTS/ HOST/NTML/M1FC to sign on positions for position preference settings; however, these systems/programs shall 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 shall not be utilized during normal daily operations.

ERAM

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

No Change

Cru-X/ART is the official time and attendance system for both signing in/out for a shift and on and off positions, not paper logs nor Common ARTS/HOST/ERAM/NTML/M1FC or other Agency or local programs. Facilities may use Common ARTS/ HOST/ERAM/NTML/M1FC to sign on positions for position preference settings; however, these systems/programs shall 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 shall not be utilized during normal daily operations.

No further changes to section

HOST

3-1-1. BASIC EQUIPMENT

a. The basic operating equipment for ARTCCs consist of flight progress boards, radar displays, communications, automation, and, where applicable, URET equipment. At facilities utilizing Ocean21, additional equipment consists of Air Traffic Situation Displays and Auxiliary Displays. This equipment is arranged in individual units called sectors and laid out in accordance with master plans maintained in the En Route and Oceanic Service Area offices. Air traffic managers may recommend changes to these plans.

ERAM

3-1-1. BASIC EQUIPMENT

a. The basic operating equipment for ARTCCs consists of flight progress boards, radar displays, communications, <u>and</u> automation equipment. At facilities utilizing Ocean21, additional equipment consists of Air Traffic Situation Displays and Auxiliary Displays. This equipment is arranged in individual units called sectors and laid out in accordance with master plans maintained in the En Route and Oceanic Service Area offices. Air traffic managers may recommend changes to these plans.

No further changes to paragraph

HOST

3-1-2. PERIODIC MAINTENANCE

Title thru c

- d. Upon facility acceptance of any URET system, that system becomes a component of the air traffic system for the purposes of requests from Technical Operations personnel for approval to shut down that system for periodic maintenance.
- e. Notification of any planned or unplanned outage of URET shall be coordinated following the guidelines in Chapter 8, NAS En Route
 Automation, and guidelines developed and maintained by URET facilities.

ERAM

3-1-2. PERIODIC MAINTENANCE

No Change

Delete

Delete

No further changes to paragraph

HOST

3-7-7. PREARRANGED COORDINATION

Title thru a

- b. When P-ACPs are established, a facility directive shall be published. The directive shall include, as a minimum:
- 1. Requirement that the <u>NAS Stage A(en route)</u> or <u>ATTS (terminal) systems</u> are fully operational.

New

New

ERAM

3-7-7. PREARRANGED COORDINATION

No Change

No Change

- 1. Requirement that the **following** are fully operational:
 - a. Terminal ATTS
- <u>b.</u> <u>En route RDP/SDP, FDP, and</u> safety alert (CA, MCI, E-MSAW) processing.

No further changes to paragraph

HOST

Chapter 6. En Route Operations and Services

Section 7. <u>User Request Evaluation Tool (URET)</u>

ERAM

Chapter 6. En Route Operations and Services

Section 7. User Request Evaluation Tool (URET) and En Route Decision Support Tool (EDST)

HOST

6-7-1. GENERAL

URET is an en route decision support tool that is used by the sector team in performing its strategic planning responsibilities. URET uses flight plan data, forecast winds, aircraft performance characteristics, and track data to derive expected aircraft trajectories, and to predict conflicts

ERAM

6-7-1. GENERAL

URET is an en route decision support tool that is used by the sector team in performing its strategic planning responsibilities. URET uses flight plan data, forecast winds, aircraft performance characteristics, and track data to derive expected aircraft trajectories, and to predict conflicts

between aircraft and between aircraft and special use or designated airspace. It also provides trial planning and enhanced flight data management capabilities. between aircraft and between aircraft and special use or designated airspace. It also provides trial planning and enhanced flight data management capabilities. <u>Under ERAM the URET capabilities constitute the initial En Route decision support tools.</u>

HOST

6-7-2. FRONT-LINE MANAGER-IN-CHARGE RESPONSIBILITIES

- a. Where authorized, perform <u>URET</u> data entries to keep the activation status of designated <u>URET</u> Airspace Configuration Elements current.
- b. Ensure that the <u>URET</u> Airspace Status Display information accurately reflects current Special Activity Airspace (SAA) status.
- c. Perform coordination and designated actions in the event of <u>a URET</u> outage or degradation, in accordance with the requirements of this order and as designated by facility directive.

ERAM

6-7-2. FRONT-LINE MANAGER-IN-CHARGE RESPONSIBILITIES

- a. Where authorized, perform data entries to keep the activation status of designated Airspace Configuration Elements current.
- b. Ensure that the Airspace Status Display information accurately reflects current Special Activity Airspace (SAA) status.
- c. Perform coordination and designated actions in the event of <u>an</u> outage or degradation, in accordance with the requirements of this order and as designated by facility directive.

No further changes to paragraph

HOST

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

- a. Ensure that the <u>URET</u> Airspace Status Display information accurately reflects current SAA status.
- b. Perform coordination and designated actions in the event of <u>a URET</u> outage or degradation, in accordance with the requirements of this order and as designated by facility directive.

ERAM

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

- a. Ensure that the Airspace Status Display information accurately reflects current SAA status.
- b. Perform coordination and designated actions in the event of <u>an</u> outage or degradation, in accordance with the requirements of this order and as designated by facility directive.

No further changes to paragraph

HOST

6-7-4. FACILITY MANAGER RESPONSIBILITIES

- a. Ensure LOAs, SOPs, and Sector Position Binders are current to support <u>URET</u>.
- 1. Facility managers shall consider <u>URET</u> functions and limitations in reviewing all current LOAs and/or negotiating all future LOAs.
- 2. The following items should be considered when reviewing LOAs:

2(a)

ERAM

6-7-4. FACILITY MANAGER RESPONSIBILITIES

- a. Ensure LOAs, SOPs, and Sector Position Binders are current to support <u>URET/EDST</u>
- 1. Facility managers shall consider <u>URET/EDST</u> functions and limitations in reviewing all current LOAs and/or negotiating all future LOAs.

No Change

No change

(b) Special <u>Use</u> Airspace (<u>SUA</u>) use and status.

2(c) thru 2(f)

- b. Ensure all facility directives are current to support <u>URET</u>. Directives shall include, but are not limited to:
 - 1. URET Outages.
- 2. <u>URET</u> Airspace Configuration Elements Data Entry.

b3

- 4. Sectors authorized to use <u>URET</u> IAFDOF Manual Mode.
- 5. Sectors authorized to use the <u>URET</u> Drop Track Delete function and the conditions under which it may be used.
- 6. Conditions under which a controller can deactivate an adapted <u>URET</u> restriction.

b7

- 8. Facility standard for annotating status of manual coordination at <u>URET</u> sectors where automated coordination with an external facility is not available (e.g., international facility, VFR tower). Facility directives may require either the use of the <u>URET</u> Coordination Menu or flight progress strips, and shall define a standard for each URET sector.
- 9. Facility standard for annotating hold instructions and reporting delay information at <u>URET</u> sectors. Facility directives may require either the use of the URET Hold Annotations, flight progress strips, or a facility-approved worksheet, and shall define a standard for each URET sector.

(b) Special $\underline{\mathbf{Activity}}$ Airspace ($\underline{\mathbf{SAA}}$) use and status.

No Change

- b. Ensure all facility directives are current to support <u>URET/EDST</u>. Directives shall include, but are not limited to:
 - 1. Outages.
- 2. Airspace Configuration Elements Data Entry.

No Change

- 4. Sectors authorized to use IAFDOF Manual Mode.
- 5. Sectors authorized to use the Drop Track Delete function and the conditions under which it may be used.
- 6. Conditions under which a controller can deactivate an adapted restriction.

No Change

- 8. Facility standard for annotating status of manual coordination at sectors where automated coordination with an external facility is not available (e.g., international facility, VFR tower). Facility directives may require either the use of the Coordination Menu or flight progress strips, and shall define a standard for each sector.
- 9. Facility standard for annotating hold instructions and reporting delay information at sectors. Facility directives may require either the use of the ERAM Hold Data Menu/Hold View, the URET Hold Annotations Menu, a flight progress strip, or a facility approved worksheet, and shall define a standard for each sector.

No further changes to paragraph

HOST

6-7-5. <u>URET</u> AIRSPACE CONFIGURATION ELEMENTS

a. URET Airspace Configuration Elements are:

a1 thru a2

- 3. URET adapted restrictions.
- b. For each adapted airspace configuration element <u>adapted in URET</u>, facility directives shall designate at least one primary position and one secondary position to be responsible to update the status (e.g., active/inactive) and/or the activation

ERAM

6-7-5. AIRSPACE CONFIGURATION ELEMENTS

a. Airspace Configuration Elements are:

No Change

- 3. Adapted restrictions.
- b. For each <u>URET/EDST adapted</u> airspace configuration element, facility directives shall designate at least one primary position and one secondary position to be responsible to update the status (e.g., active/inactive) and/or the activation

schedule for that element.

NOTE-

- 1. Accurate conflict probe results require timely updates to the current activation status and/or the projected activation schedule for airspace configuration elements.
- 2. Designating a position to have secondary responsibility for each <u>URET</u> Airspace Configuration Element is essential to maintain the capability to perform updates in the event that equipment at the primary position is temporarily out of service.
- 3. Positions to be considered for primary or secondary designation include a specified sector, TMU, or operations supervisor.
- c. ATC positions and personnel authorized by facility directive shall perform automation entries in <u>URET</u> in a timely manner to update the status of SAAs, restrictions, and ASF.
- d. For a <u>URET</u> airspace configuration element that is associated with a particular sector or sectors and whose status is highly dynamic in nature:
- 1. The designated sector(s) should be assigned the primary responsibility to keep the URET status current.
- 2. The TMU or the appropriate operations supervisor should be assigned the secondary responsibility to keep <u>URET</u> status current.

HOST

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

Use of the checkbox flight data management feature of <u>URET</u> shall be standardized in accordance with individual facility directives.

HOST

6-7-7. URET OUTAGES

a. In accordance with Chapter 8, NAS En Route Automation, and the requirements in this chapter, <u>URET</u> facilities shall develop and maintain procedures for transition to and from <u>URET</u> operations.

schedule for that element.

NOTE-

- 1. Accurate conflict probe results require timely updates to the current activation status and/or the projected activation schedule for airspace configuration elements.
- 2. Designating a position to have secondary responsibility for each <u>URET/EDST</u> Airspace Configuration Element is essential to maintain the capability to perform updates in the event that equipment at the primary position is temporarily out of service.
- 3. Positions to be considered for primary or secondary designation include a specified sector, TMU, or operations supervisor.
- c. ATC positions and personnel authorized by facility directive shall perform automation entries in a timely manner to update the status of SAAs, restrictions, and ASF.
- d. For a <u>URET/EDST</u> airspace configuration element that is associated with a particular sector or sectors and whose status is highly dynamic in nature:
- 1. The designated sector(s) should be assigned the primary responsibility to keep the **URET/EDST** status current.
- 2. The TMU or the appropriate operations supervisor should be assigned the secondary responsibility to keep **URET/EDST** status current.

ERAM

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

Use of the checkbox flight data management feature of <u>URET/EDST</u> shall be standardized in accordance with individual facility directives.

ERAM

6-7-7. OUTAGES

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

NOTE-

The back-up for <u>URET</u> is flight progress strips.

b. Planned Outages.

b1 thru b2

3. The Operations Manager shall notify the <u>neighboring URET</u> facilities of a planned URET outage no less than 1 hour in advance.

b4 thru b6

- c. Unplanned **URET** Outages.
- 1. A facility directive shall include a checklist detailing actions to be taken and roles and responsibilities during an unplanned <u>URET</u> outage.
- 2. When an unplanned URET outage occurs, sectors shall post and maintain flight progress strips in accordance with FAAO 7110.65, Air Traffic Control, requirements for a non-URET environment, except as otherwise permitted by facility directive.

NOTE-

- 1. A full transition to strips may not be necessary based on the duration of the outage. Outages of short duration may allow continued use of the URET data while strips are prepared for use in the event that the outage continues.
- 2. A "snapshot" of URET flight data at the time of the outage will be available to the sector team. Although the data will not be updated and will become stale, it may be used to assist the sector team while reestablishing the support of strips.
- 3. Any failure recovery action that will result in the automatic clearing of the URET data on a position's display shall be approved by the Operations Manager.
 - d. Degraded Conditions.
- 1. In the event that URET is operational, but alert data may be affected due to an associated equipment malfunction, the National Operations Manager (NOM) shall notify the Operations Manager who shall in turn notify Operations Supervisors. Each Operations Supervisor shall ensure that each sector team in their area of specialization is cognizant of the potential for degradation.

NOTE-

The back-up for <u>electronic flight data</u> is flight progress strips.

b. Planned URET/EDST Outages.

No Change

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

No Change

- c. Unplanned Outages.
- 1. A facility directive shall include a checklist detailing actions to be taken and roles and responsibilities during an unplanned outage.
- 2. When an unplanned URET/EDST outage occurs, sectors shall post and maintain flight progress strips in accordance with FAAO 7110.65, Air Traffic Control, requirements for a non-URET/EDST environment, except as otherwise permitted by facility directive.

NOTE-

- 1. A full transition to strips may not be necessary based on the duration of the outage. Outages of short duration may allow continued use of the URET/EDST data while strips are prepared for use in the event that the outage continues.
- 2. A "snapshot" of URET/EDST flight data at the time of the outage will be available to the sector team. Although the data will not be updated and will become stale, it may be used to assist the sector team while reestablishing the support of strips.
- 3. Any failure recovery action that will result in the automatic clearing of the URET/EDST data on a position's display shall be approved by the Operations Manager.

No Change

1. In the event that URET/EDST data may be affected due to an associated equipment malfunction, the National Operations
Manager (NOM) shall notify the Operations
Manager who shall in turn notify Operations
Supervisors. Each Operations Supervisor shall ensure that each sector team in their area of specialization is cognizant of the potential for degradation.

HOST

6-7-8. TRANSITION AND TRAINING PLANNING

The Facility air traffic manager shall ensure that detailed facility plans are prepared defining:

- a. Training schedules of Certified Professional Controllers, Operations Supervisors, Operations Managers, Traffic Management Coordinators, and Traffic Management Supervisors.
- b. Training schedules of developmental controllers based on national training directives.

ERAM

6-7-8. **RESERVED**

Delete

Delete

Delete

HOST

6-7-9. RESTRICTIONS INVENTORY AND EVALUATION

- a. Facilities shall identify responsibilities and establish procedures for the creation and maintenance of a facility restriction inventory <u>once URET is fully operational</u>. Facility plans should include identification and cataloging each air traffic restriction by type, purpose, and frequency/duration in effect.
- b. Facilities shall create a plan and conduct ongoing evaluations on the need to relax or remove restrictions not warranted during URET operations. This shall include URET impact on ability to relax/remove restrictions and identification of dependencies between ability to remove restrictions and automation capabilities/limitations.
- c. Submit annually to the Vice President of En Route and Oceanic Services, an Evaluation Report on facility restriction relaxation/removal related to URET.

ERAM

6-7-9. RESTRICTIONS INVENTORY AND EVALUATION

- a. Facilities shall identify responsibilities and establish procedures for the creation and maintenance of a facility restriction inventory. Facility plans should include identification and cataloging each air traffic restriction by type, purpose, and frequency/duration in effect.
- b. Facilities shall create a plan and conduct ongoing evaluations on the need to relax or remove restrictions not warranted during URET/EDST operations. This shall include URET/EDST impact on ability to relax/remove restrictions and identification of dependencies between ability to remove restrictions and automation capabilities/ limitations.
- c. Submit annually to the Vice President of En Route and Oceanic Services, an Evaluation Report on facility restriction relaxation/removal related to URET/EDST.

No further changes to paragraph

HOST

6-7-10. TRAFFIC COUNTS AND DELAY REPORTING

- a. Automated counts of traffic activities are the preferred methods <u>during use of URET</u>.
- b. Adherence to all applicable delay reporting directives shall continue while URET is

ERAM

6-7-10. TRAFFIC COUNTS AND DELAY REPORTING

- a. Automated counts of traffic activities are the preferred methods.
- b. Adherence to all applicable delay reporting directives shall continue while URET/EDST is

operational.

c. Delay information, shall be recorded on available flight progress strips, on facility approved forms, or via the automated <u>URET</u> delay reporting features for aircraft in hold. Facility directives shall detail the procedures for collecting and reporting this information to the ATCSCC.

HOST

6-7-11. COMPUTER DATA RETENTION

Follow the guidelines detailed in this order to retain <u>URET</u> recorded data.

HOST

6-7-12. WAIVER TO INTERIM ALTITUDE REQUIREMENTS

- a. If, <u>at any URET facility</u>, a facility directive has been issued to waive the mandatory computer entry of interim altitudes, controllers and supervisors in any affected area and adjacent areas or facilities shall be informed of the resulting potential for misleading <u>URET</u> alert data.
- b. Each <u>URET</u> facility should strongly consider the benefits of <u>URET</u> in evaluating any current or future waiver for data entry of interim altitudes. <u>URET</u> accuracy in assigning alert priorities for surrounding sectors, including those in <u>neighboring URET</u> facilities, is dependent upon the subject sector's entry/update of interim altitudes.

HOST

6-7-13. TRANSFER OF POSITION RESPONSIBILITY

Each <u>URET</u> facility shall ensure that pertinent URET information is integrated into any Position Relief briefing list, whether manual or electronic.

operational.

c. Delay information, shall be recorded on available flight progress strips, on facility approved forms, or via the automated delay reporting features for aircraft in hold. Facility directives shall detail the procedures for collecting and reporting this information to the ATCSCC.

ERAM

6-7-11. COMPUTER DATA RETENTION

Follow the guidelines detailed in this order to retain **URET/EDST** recorded data.

ERAM

6-7-12. WAIVER TO INTERIM ALTITUDE REQUIREMENTS

- a. If a facility directive has been issued to waive the mandatory computer entry of interim altitudes, controllers and supervisors in any affected area and adjacent areas or facilities shall be informed of the resulting potential for misleading **conflict probe** alert data.
- b. Each facility should strongly consider the benefits of <u>conflict probe</u> in evaluating any current or future waiver for data entry of interim altitudes. <u>Conflict probe</u> accuracy in assigning alert priorities for surrounding sectors, including those in <u>adjacent</u> URET/<u>ERAM</u> facilities, is dependent upon the subject sector's entry/update of interim altitudes.

ERAM

6-7-13. TRANSFER OF POSITION RESPONSIBILITY

Each facility shall ensure that pertinent URET/EDST information is integrated into any Position Relief briefing list, whether manual or electronic.

No further changes to section

HOST

8-2-1. <u>SINGLE SITE COVERAGE STAGE A</u> OPERATIONS

Facilities may adapt all sort boxes within 40 miles

ERAM

8-2-1. THREE MILE OPERATIONS

Facilities may adapt airspace to permit the use of

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 7110.65, Air Traffic Control, subpara 5-5-4b3, Minima. This adaptation may be used provided:

- a. A significant operational advantage will be obtained <u>using single site coverage</u>. Consideration <u>must</u> 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 <u>modified</u> area.
 - 3. Accommodate local procedural changes.

New

New

New

New

New

- 3 <u>NM</u> separation as defined in FAAO 7110.65, Air Traffic Control, subpara 5-5-4b3, <u>or</u> <u>subpara 5-5-4d</u>, provided <u>all of the following are</u> met:
- a. A significant operational advantage will be obtained. Consideration **shall** be given to such aspects as terminal interface, radar reliability, etc.;
- b. Facility directives are issued to:
 - 1. Define the 3 NM separation area.
- 2. Permit 3 NM separation in the **defined** area.

No Change

c. ERAM:

- 1. Within 40 NM of the preferred sensor.
- 2. The 3 NM separation area is displayable on the video map.
- 3. The aircraft alert volume is adapted for 3 NM separation.
- d. Non-ERAM: All sort boxes within 40 miles of the antenna are adapted to that site as preferred and with the single site indicator set to permit the use of 3 NM radar separation.

HOST

8-2-2. ADAPTED ALTIMETER SETTINGS

Ensure a current altimeter setting from the adapted reporting station for each radar sort box or geographic area is input into the center's computer. When an altimeter setting for an adapted reporting station cannot be obtained, enter the altimeter setting from the appropriate alternate reporting station.

ERAM

8-2-2. ADAPTED ALTIMETER SETTINGS

Ensure a current altimeter setting from the adapted reporting station for each radar sort box/cell or geographic area is input into the center's computer. When an altimeter setting for an adapted reporting station cannot be obtained, enter the altimeter setting from the appropriate alternate reporting station.

HOST

8-2-4. CONFLICT ALERT FUNCTION PARAMETERS

a. Use the nominal value of parameters specified in NAS Configuration Management Documents for the CA function unless a waiver to adjust parameter value is received from the En Route and

ERAM

8-2-4. CONFLICT ALERT FUNCTION PARAMETERS

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

Oceanic Safety and Operation Support Office.

b. Facility air traffic managers are authorized to inhibit the display of CA at specified sectors.

HOST

8-2-5. PARAMETERS

a. Use the nominal value of parameters specified in the NAS Configuration Management Document for the MCI Alert function, except the base altitude parameter, unless a waiver to adjust parameter value is received from the En Route and Oceanic Safety and Operations Support Office.

Support Office.

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

ERAM

8-2-5. PARAMETERS

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

No further changes to paragraph

HOST

8-2-6. E-MSAW ADAPTATION

Ensure that all internal airspace is adapted for E-MSAW processing. Ensure that the altitude information adapted in the polygons agrees with the MIA sector charts and that the automation is adapted in accordance with the appropriate NAS Management Documents.

ERAM

8-2-6. E-MSAW ADAPTATION

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

HOST

8-2-7. WAIVER TO INTERIM ALTITUDE REQUIREMENTS

Where sector conditions; e.g., heavy traffic or sector complexity, preclude meeting the requirements of FAAO 7110.65, Air Traffic Control, subpara 5-14-3b, Computer Entry of Assigned Altitude, ARTCC air traffic managers may authorize the deletion of the requirements if an operational advantage is gained. A facility directive shall be issued with instructions governing permissible procedures. It shall contain:

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

ERAM

8-2-7. WAIVER TO INTERIM ALTITUDE REQUIREMENTS

Where sector conditions; e.g., heavy traffic or sector complexity, preclude meeting the requirements of FAAO 7110.65, Air Traffic Control, subpara 5-14-3b, Computer Entry of Assigned Altitude, ARTCC air traffic managers may authorize the deletion of the requirements if an operational advantage is gained. A facility directive or LOA shall be established which contains:

- a. Sectors where the waiver applies.
- b. Procedures, including any required coordination.

No Change

HOST

New Paragraph

New

New

New

New

New

New

New

ERAM

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

Where sector conditions offer a significant operational advantage, air traffic managers may authorize exceptions to data block change coordination required by FAAO 7110.65, Air Traffic Control, para 5-4-5, Transferring Controller Handoff, and FAAO 7110.65, Air Traffic Control, para 5-4-6, Receiving Controller Handoff. The facility directive or LOA shall contain, as a minimum:

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

EXAMPLE-

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

NOTE-

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

- a. an "up arrow" in which aircraft will not climb beyond displayed assigned altitude, and
- <u>b.</u> <u>a "T" (interim) altitude where the aircraft may</u> climb beyond the currently displayed interim altitude.

HOST

New Paragraph

New

New

New

New

ERAM

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

- a. Where sector conditions offer a significant operational advantage, air traffic managers may authorize exceptions to FAAO 7110.65, Air Traffic Control, para 5-14-9, ERAM Computer Entry Hold Information. The facility directive shall contain, as a minimum:
 - 1. Sectors where the directive applies.
 - 2. Required coordination procedures.
 - 3. Specific instructions for reporting

New

New

New

New

New

delays.

b. Where sector conditions offer a significant operational advantage, air traffic managers may authorize the use of the LDB or ELDB for aircraft in hold, as exceptions to the requirements of FAAO 7110.65, Air Traffic Control, para 5-3-8, Target Markers. The facility directive shall contain, as a minimum:

- <u>1. Procedures/sectors where the directive</u> applies.
 - 2. Required coordination procedures.

NOTE-

Consideration needs to be given to differences in the brightness level and the display of assigned altitude in the different data block types.

REFERENCE-

FAAO 7210.3, Para 6-7-4, Facility Manager Responsibilities.

HOST

New Paragraph

New

ERAM

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

<u>Facilities shall ensure that every SAA within</u> <u>their Aircraft Problem Detection (APD) Area is</u> <u>adapted for SAA scheduling and alert</u> processing.

HOST

New

New

New

ERAM

8-2-11. ERAM Holding Pattern Adaptation

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

NOTE-

Adapting holding patterns will reduce controller workload by automatically populating the Hold Data Menu. Therefore, facilities should consider adapting all frequently used holding patterns.

HOST

New Paragraph

New

ERAM

8-2-12. ERAM MASTER TOOLBAR MAP BUTTON LABEL

Ensure the adapted label of the GEOMAP button matches the name of the GEOMAP selected at the sector. The map button label may

New

<u>be displayed on two lines and may include</u> spaces to improve label readability.

NOTE-

Since the GEOMAP is saved with the preference set, displaying the map name on the GEOMAP button label provides a visual indication to the controller when a GEOMAP changes as a result of invoking a preference set.

No further changes to section

HOST

8-3-3. SELECTED ALTITUDE LIMITS

Title thru a

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 <u>beacon code and</u> 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.

ERAM

8-3-3. SELECTED ALTITUDE LIMITS

No Change

No Change

NOTE-

1. The data block, for purposes of this paragraph, must contain the <u>mode C altitude</u>, and call sign or beacon code, at a minimum.

No Change

No further changes to section

HOST

17-9-6. ATCSCC PROCEDURES

a thru d

e. Transmit EDCTs to ARTCCs and linked system users.

NOTE-

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

ERAM

17-9-6. ATCSCC PROCEDURES

No Change

No Change

NOTE-

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

No further changes to paragraph

HOST

17-9-8. TERMINAL PROCEDURES

Title thru b

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

ERAM

17-9-8. TERMINAL PROCEDURES

No Change

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

No further changes to section

HOST

17-15-4. COORDINATION PROCEDURES

a thru c1(b)

(c) When establishment, change, or deletion of a preferred route is proposed by a facility other than an ARTCC, the requesting facility shall coordinate with the <u>host</u> ARTCC. <u>The host</u> ARTCC shall assume responsibility as the originator.

ERAM

17-15-4. COORDINATION PROCEDURES

No Change

(c) When establishment, change, or deletion of a preferred route is proposed by a facility other than an ARTCC, the requesting facility shall coordinate with the **appropriate** ARTCC. **That** ARTCC shall assume responsibility as the originator.

No further changes to section

HOST

17-17-4. RESPONSIBILITIES

a thru b

c. ARTCCs shall:

c1 thru c5

6. Ensure HOST Stereo Flight Plans used for CDRs and CDRs published in the operational database.

ERAM

17-17-4. RESPONSIBILITIES

No Change

c. ARTCCs shall:

No Change

6. Ensure HOST/ERAM Stereo Flight Plans used for CDRs and CDRs published in the operational database are identical.

No further changes to paragraph

HOST

17-17-5. CDR DATA FORMAT

a thru e1

2. No dots, dashes, asterisks, plus signs, or placeholders are to be included. While these elements may be used in the HOST environment, because most flight planning systems will not accept them.

ERAM

17-17-5. CDR DATA FORMAT

No Change

2. No dots, dashes, asterisks, plus signs, or placeholders are to be included **because** most flight planning systems will not accept them.

No further changes to section

HOST

17-20-4. RESPONSIBILITIES

a thru d

e. Terminal Facilities shall coordinate with <u>their host</u> ARTCC for all matters pertaining to National Playbook.

ERAM

17-20-4. RESPONSIBILITIES

No Change

e. Terminal Facilities shall coordinate with <u>the</u> <u>appropriate</u> ARTCC for all matters pertaining to National Playbook.

No further changes to section