DOCUMENT CHANGE PROPOSAL/BRIEFING SHEET

FINAL DISPOSITION (INITIAL Not Required)

ORDER/PUBLICATION: 7210.3V
CHANGE: 3
EFFECTIVE DATE: August 27, 2009 **TRACKING #: 33- 11-9-1**
SPECIALIST/ROUTING: Allie Metcalf AJR-53 x35482

1. PARAGRAPH NUMBER AND TITLE:

11-9-1. SYSTEM OPERATION

2. BACKGROUND: Airport Surface Detection Equipment System - Model X (ASDE-X) was originally designed with surface movement radar (SMR) and Multilateration (MLAT) for airports with no surface surveillance. SMR radar was not intended to provide total coverage of the entire airport. ASDE-X uses fusion as a way of creating "seamless coverage" from all sensors (MLAT, SMR, and ASR). The original design was to critically fault and go off line when MLAT or the SMR radar was unavailable. Radar-only mode allows the ASDE-X system to remain operational if the MLAT sub-system incurs a critical fault and is off-line. Radar-only mode is equivalent to the present ASDE3/AMASS operation at legacy airports.

3. EXPLANATION OF CHANGE: Change FAAO JO 7210.3 Facility Operation and Administration, Chapter 11 section 9 paragraph 1 to add a new subparagraph addressing "RADAR-ONLY MODE". This change cancels and incorporates N JO 7210.712, ASDE-X Radar Only Mode, effective April 30, 2009.

4. CHANGE:

OLD	**NEW**
11-9-1. SYSTEM OPERATION	11-9-1. SYSTEM OPERATION
a. Safety Logic Systems are software enhancements to the ASDE-3 and 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.	a. Safety **l**ogic **s**ystems 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. AMASS is a safety logic system enhancement to the ASDE-3.	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.	2. ASDE-X Safety Logic is a system enhancement to ASDE-X.
b. The Safety Logic System shall be operated in a full core alert runway configuration. (In ASDE X, when rain configuration is selected, it includes full core alerting capabilities.)	b. The **s**afety **l**ogic **s**ystem **must** be operated in a full core alert runway configuration. (In ASDE-X, when rain configuration is selected, it includes full core alerting capabilities.)
Add	**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.”
Add	**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.**
Add	**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.**
c. When ASDE-3 and/or AMASS is in maintenance mode, AMASS data shall be considered invalid and the system shall be taken offline. The front-line manager/CIC shall validate, upon resumption of normal AMASS operations, that runway configurations and other user settings are adequate for operational use.	**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.*	***NOTE-*** *Action to change AMASS online/offline status is a **t**echnical **o**perations function. ASDE-X safety logic will automatically be disabled when the system is in maintenance mode.*
d. 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.	**e.** When a runway becomes unavailable for aircraft operations for an extended period of time, the runway should be entered as “**c**losed” in the **s**afety **l**ogic **s**ystem. Facility procedures should be developed to address using the **s**afety **l**ogic **s**ystem in this capacity.
e. 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 shall contact NASE via email at either 9-AMCATOW-ASDE-X@faa.gov or 9-AMC-AOSAMASS@faa.gov, 30 to 45 days before the construction is scheduled to begin to assist in determining whether an adaptation is necessary.	**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 either 9-AMCATOW-ASDE-X@faa.gov or 9-AMC-AOSAMASS@faa.gov, 30 to 45 days before the construction is scheduled to begin to assist in **deciding if** an adaptation is necessary.
f. ASDE-X false targets may be temporarily	**g.** ASDE-X false targets may be temporarily

track dropped after positive verification has been accomplished via pilot/vehicle operator position report or controller visual observation. When a false target is temporarily dropped, it shall be noted on FAA Form 7230-4, Daily Record of Facility Operation.

REFERENCE-
FAAO JO 7110.65, Para 3-6-2, Identification.

g. 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.

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.

h. The **a**ir **t**raffic **m**anager may authorize a real target to be inhibited from safety logic processing when the target will likely generate a nuisance alert.

No further changes to paragraph.

5. INDEX CHANGES: None

6. GRAPHICS: None

7. GENOT/NOTICE: N JO 7210.712, ASDE-X Radar Only Mode, effective April 30, 2009.

8. SAFETY RISK MANAGEMENT: (Check appropriate box).

☐ Proposed change meets full SMS requirements for safety risk assessment.

☐ (For organizations that have not fully implemented SMS), the proposed change is in accordance with FAAO 1100.161, Air Traffic Safety Oversight, Chapter 5, Paragraph 2 requirements.

☒ Proposed change is not safety related.

Comments:

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3/27/09
Date: