

**DOCUMENT CHANGE PROPOSAL/BRIEFING SHEET**

**FINAL DISPOSITION (INITIAL Not Required)**

**ORDER/PUBLICATION:** 7210.3X

**CHANGE:** 1

**EFFECTIVE DATE:** July 26, 2012      **TRACKING #:** 31- 3-9-1

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**1. PARAGRAPH NUMBER AND TITLE:**

3-9-1. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) FOR FACILITIES PROVIDING TERMINAL APPROACH CONTROL SERVICES

**2. BACKGROUND:** FUSION is the combination of all available surveillance sources (airport surveillance radar [ASR], air route surveillance radar [ARSR], automatic dependent surveillance – broadcast [ADS B], etc.) into the display of a single track for each target for air traffic control separation services. FUSION is the equivalent of the current single-sensor radar display. FUSION performance is characteristic of a single-sensor radar display system. The performance of this system will be used as the baseline radar system to ensure minimal degradation of current separation operations within the NAS. This paragraph incorporates processes for development of MVA Charts for locations using the FUSION software and tracker. The agency has been crafting tailored Notices for individual facilities that are planning to utilize FUSION and have reached initial operating capability (IOC). By incorporating this content into this handbook, future individual notices will no longer be required.

**3. EXPLANATION OF CHANGE:** This change adds procedures for facilities that use FUSION in their development of MVA Charts, and revises references to the National Flight Procedures Group to the ATC Products Group, due to recent reorganizations.

**4. CHANGE:**

**OLD**

3-9-1. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) FOR FACILITIES PROVIDING TERMINAL APPROACH CONTROL SERVICES

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

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

a1 thru a2

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

c. Where the system is adapted to display multiple radar sensors in a priority sequence (for example, sort boxes), provide an MVAC that accommodates the largest separation minima of adapted sensors.

Add

**NEW**

3-9-1. MINIMUM VECTORING ALTITUDE CHARTS (MVAC) FOR FACILITIES PROVIDING TERMINAL APPROACH CONTROL SERVICES

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

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

No change

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

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

**1. The lateral limits of the associated approach control airspace and an appropriate buffer outside the lateral approach control**

airspace boundaries. The MVAC must provide for 3-mile separation minima or more from obstacles, except when applying the provision in paragraph 3-9-1c2 below. As a minimum, this may be accomplished by using the existing single-sensor MVAC for the predominant radar sensor; and

Add

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

Add

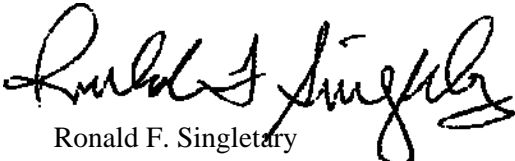
d. At locations adding FUSION, provided the facility uses existing MVA charts with 3-mile buffers and an MVAC with 5-mile buffers, additional charts do not need to be developed to support FUSION.

*NOTE-  
Technical Operations Aviation System Standards,  
National Flight Procedures Group should be contacted  
if assistance is required. (See FAAO 8260.3, United  
States Standard for Terminal Instrument Procedures  
(TERPS) Chapter 10.)*

*NOTE-  
Mission Support Services-Aeronautical Products, ATC  
Products Group, should be contacted if assistance is  
required. (See FAAO 8260.3, United States Standard  
for Terminal Instrument Procedures (TERPS) Chapter  
10.)*

No further changes to paragraph.

- 5. **INDEX CHANGES:** None
- 6. **REFERENCE CHANGES:** None
- 7. **GRAPHICS:** None
- 8. **GENOT/NOTICE:**
- 9. **FORMATTING & PLAIN LANGUAGE REVIEW:**  HM 6/28/2011
- 10. **SAFETY RISK MANAGEMENT:** (Check appropriate box).
  - SRMD. Proposed change meets full SMS requirements for safety risk assessment.
  - SRMDM. Proposed change is not safety related.
- 11. **ICAO DIFFERENCES:** YES  NO

  
Ronald F. Singletary  
Manager, Terminal Operations Group

6/29/11

Date: