



Federal Aviation Administration

Memorandum

Date: JAN 15 2008

To: Danny E. Hamilton, Manager, National Flight Procedures Office, AJW-32

From: John W. McGraw, Manager, Flight Technologies and Procedures Division, AFS-400 *[Signature]*

Subject: Implementation of Order 8260.54A, United States Standard for Area Navigation (RNAV)

PURPOSE

This memorandum provides policy guidance for instrument procedure developers concerning the implementation of Federal Aviation Administration (FAA) Order 8260.54A.

IMPLEMENTATION POLICY

- Order 8260.54A is effective on 01/01/2008. This directive cancels and replaces Order 8260.38A, Civil Utilization of Global Positioning System (GPS), Order 8260.48, Area Navigation (RNAV) Approach Construction Criteria, and Order 8260.51, U.S. Standard for Required Navigation Performance (RNP) Instrument Approach Procedure Construction. It is the first 8260 series order written for automated procedure construction, and establishes the foundation for future Performance Based Navigation (PBN) construction criteria.
- Order 8260.54A establishes a new geospatial standard for both PBN and conventional instrument procedure construction. This geodetic engine is essential to the implementation of the performance based National Airspace System (NAS). The standard is different than the geodetic routines currently used in procedure construction, and requires considerable time, effort, and financial investment to implement, therefore:
 - Full compliance with the new geospatial standard is required by the end of fiscal year 2012.
 - In the interim, adjustment to current systems that will achieve accuracy within 30 centimeters of the standard is acceptable.

- FAA procedure developers will implement FAA Order 8260.54A when procedure development software is modified to apply the revised criteria. Implementation should not exceed 1 year from release of the revision. In order to maximize resource utilization, FAA procedure developers must apply these criteria to:
 1. All new (original) RNAV approach procedures
 2. All RNAV procedure amendments (except abbreviated amendments)
 3. All other RNAV procedures as time and resources permit

- Non-FAA procedure developers must apply these criteria to:
 4. All new (original) RNAV procedures
 5. All RNAV procedure amendments submitted after the effective date above
 6. All RNAV procedures they maintain no later than the required biennial review

- Order 8260.54A allows construction of an RNAV (GPS) approach procedure that includes an instrument landing system (ILS) line of minimums on ILS runways. We suggest initial application of these criteria be limited to locations where the capability will prove beneficial; e.g., at William B. Hartsfield Atlanta International Airport and Miami International Airport in support of the AIRE project (continuous descent approaches (CDA), reduced emissions, etc.).

- U.S. Air Force (USAF): Will implement FAA Order 8260.54A when procedure development software is modified to apply the revised criteria. Implementation should not exceed 1 year from release of the revision. All instrument procedures will then be updated within 6 months of automation support.

- U.S. Navy (USN): Will implement FAA Order 8260.54A when procedure development software is modified to apply the revised criteria. Additionally, USN will, where necessary, design RNAV procedures with holding-in-lieu of procedure turn at the precise final approach fix (PFAF). These procedures will be annotated "Not For Civil Use".

If you have any questions, please contact Mr. Harry Hodges, Manager, Flight Procedure Standards Branch, AFS-420, at (405) 954-4164.