

## U.S. DEPARTMENT OF TRANSPORTATION

## FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

N JO 7110.592

Effective Date: August 23, 2012

Cancellation Date: March 7, 2013

SUBJ: Global Navigation Satellite System (GNSS) Minimum En Route Instrument Flight Rules (IFR) Altitude (MEA)

- 1. Purpose of This Notice. This change provides guidance to air traffic control for using GNSS MEAs on published air traffic service (ATS) routes. This notice also adds the International Civil Aviation Organization (ICAO) definition of Global Navigation Satellite System and the definition of GNSS Minimum En Route IFR Altitude (GNSS MEA) to the Pilot/Controller Glossary (PCG).
- **2. Audience**. This notice applies to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, Mission Support, and System Operations; and all associated air traffic control facilities.
- **3.** Where Can I Find This Notice? This 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/air\_traffic/publications/.
- **4. Explanation of Changes**. This change provides guidance to air traffic control for using GNSS MEAs on published ATS routes.
- 5. Procedures.
  - **a.** Amend the following paragraphs in FAA Order JO 7110.65 to read as follows:

## 4-5-6. MINIMUM EN ROUTE ALTITUDES

Title through c, no change.

d. GNSS MEAs may be approved on published ATS routes. Air traffic may assign GNSS MEAs to GNSS-equipped aircraft where established.

## NOTE-

On high altitude ATS routes, the GNSS MEA is FL180 unless published higher.

Subparagraph d, renumber to e.

**b.** Add the following definitions to the PCG:

**GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) [ICAO] -** A worldwide position and time determination system that includes one or more satellite constellations, aircraft receivers and system integrity monitoring, augmented as necessary to support the required navigation performance for the intended operation.

GLOBAL NAVIGATION SATELLITE SYSTEM MINIMUM EN ROUTE IFR ALTITUDE (GNSS MEA) - The minimum en route IFR altitude on a published ATS route or route segment which assures acceptable GNSS reception and meets obstacle clearance requirements.

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**6. Distribution**. This notice is distributed to the following ATO service units: Terminal, En Route and Oceanic, System Operations, and Mission Support; Office of ATO Safety and Technical Training; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

7. Background. Since 2002, Global Positioning Systems/Wide Area Augmentation System (GPS/WAAS) MEAs have been certified on some low altitude ATS routes, mostly in Alaska. GNSS-equipped aircraft are equipped with GPS or WAAS, with en route and terminal capability. The GNSS MEA allows appropriately-equipped GNSS aircraft to fly at altitudes lower than conventional MEAs when there are restrictions due to NAVAID coverage. When established on Victor airways, the GNSS MEA provides an advantage to pilots by allowing flight below potential adverse weather conditions (for example, icing conditions or other) where conventional MEAs may be restricted due to NAVAID coverage. The GNSS MEA on a Victor airway provides air traffic control an advantange by making additional cardinal altitudes available on the airway. GNSS MEAs are also published on low altitude Tango or "T" routes, high altitude Q routes as well as jet routes. No guidance was previously published regarding GNSS MEAs. For the purpose of this change, all previously designated routes are termed ATS routes as defined in the PCG. The GNSS MEA is for use in the 48 contiguous states only; Alaska requirements remain unchanged.

Elizabeth L. Ray

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Air Traffic Organization

uly 19, 2012

Date Signed