Subject: Altimetry System Error Reports (ASE-R).

Purpose: This InFO provides background information and notice of expected participation in the ASE-R process by operators with Reduced Vertical Separation Minimum (RVSM) authority.

Background: An element of the global implementation of RVSM is the establishment of a safety management system (SMS) to ensure RVSM safety objectives are being maintained. This ongoing process seeks to capture data on a continuing basis and identify risks at its earliest stages. Regional Monitoring Agencies (RMA) have been established to monitor altimetry system errors (ASE) and verify that the target level of safety for RVSM operations continues to be met. ASE is the difference between the pressure altitude displayed to the flightcrew when referenced to International System of Units (SI) standard ground pressure setting (29.92 inches of mercury (inHg)/1013.25 hectopascals (hPa)) and free stream pressure altitude. ASE is invisible to the pilot, Air Traffic Control and Traffic, Alert and Collision Avoidance System (TCAS) and can lead to hazardous loss of separation.

Discussion: The Federal Aviation Administration (FAA) RVSM Performance Assurance Team (PAT) Team is staffed by subject matter experts from the North American Approvals Registry and Monitoring Organization (NAARMO), the Separation Standards Analysis Branch at the FAA William J. Hughes Technical Center, The Flight Standards (FS) Flight Technologies and Procedures Division’s Flight Operations Group, and FS’ Aircraft Maintenance Division’s General Aviation Group’s, Avionics Section. The NAARMO obtains aircraft RVSM operations data using Automatic Dependent Surveillance – Broadcast Out (ADS-B Out), or Global Positioning System (GPS) based Measurement Units (GMU) to determine ASE for aircraft operating in North American airspace. In conjunction with the FAA RVSM PAT this group determines if an ASE-R is warranted. The RVSM PAT notifies the appropriate FS oversight office to contact operators of aircraft exhibiting non-compliant RVSM performance through the issuance of the ASE-R.

ASE-R Process:
1. The ASE-R is forwarded to the operator’s responsible FS office.

2. The oversight office will contact the operator and determine a plan of action. In cases where corrective actions taken in accordance with Instructions for Continued Airworthiness (ICA) fail to
provide positive results, the type certificate holder (TCH) or Supplemental Type Certificate (STC) holder may be consulted. This coordination should involve the respective Aircraft Evaluation Division (AED) and responsible Aircraft Certification Service office.

3. Following corrective actions, the aircraft performance may be monitored using ADS-B Out or through use of a GPS Monitoring Units (GMU).

4. After analyzing follow-on monitoring results, the NAARMO will release a report of either satisfactory resolution or notify the responsible FS office of unsatisfactory results.

5. In the case of an unsatisfactory results, the oversight office may contact the RVSM PAT for additional assistance. This may require interaction with the responsible Aircraft Certification Service office, AED and aircraft/system manufacturer.

6. Operators that experience fleet wide ASE issues should include any manufacturer procedures in their maintenance programs found to be effective in correcting ASE. Additionally, operators with reliability programs or a Continued Analysis Surveillance System (CASS) are encouraged to use ASE-R information as a source of data collection.

**Recommended Action:** Operators with RVSM authority should familiarize themselves with the information contained in this InFO. More information on RVSM may be found at the Reduced Vertical Separation Minimum (RVSM) webpage.

**Contact:** Questions or comments regarding this InFO should be directed to the Flight Technologies and Procedures Division at (202) 267-8850 or the Aircraft Maintenance Division (202) 267-1675.