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OPSB 0065-07

Date: May 11, 2007

To: Operators of Rockwell Collins Flight Management Systems

From: Commercial Systems Customer Services

Subject: FAA Advisory Circular AC 90-100A

Overview

The FAA has issued Advisory Circular 90-100A (AC 90-100A) for "U.S. Terminal and En Route Area Navigation (RNAV) Operations" provides operational and airworthiness guidance for operation on U.S. Area Navigation (RNAV) routes, Instrument Departure Procedures (DPs), and Standard Terminal Arrivals (STARs). AC 90-100A does not apply to over water RNAV routes (ref 14 CFR 91.511, including the Q-routes in the Gulf of Mexico and the Atlantic routes) or Alaska VOR/DME RNAV routes ("JxxxR"). It does not apply to off-route RNAV operations, Alaska GPS routes or Caribbean routes, or helicopter operations involving offshore or specific heliport procedures. "See AC 90-100A regarding the Operator Approval Process."

The Rockwell Collins FMS-3000/4200/5000/6000/6100 equipment meet the functional and performance criteria of U.S. RNAV routes, DPs, and STARs in accordance with AC 90-100A, provided that:

- The Flight Management System (FMS) and GPS-4000() are installed and approved for IFR use in accordance with AC 20-130A.
- The aircraft must be operated in accordance with AC 90-100A, paragraph 10b(9) regarding use of flight director and/or autopilot.
- Operator/pilot must confirm the validity of the Type 2 LOA for the navigation database for the intended operations. See <http://www.rockwellcollins.com/fms/naalerts.asp>

- For GPS-4000 and GPS-4000A installations, the operator/pilot must confirm GPS RAIM availability for the intended route, in accordance with AC 90-100A, for which Collins provides Pre-Departure RAIM Predictor Tool CPN 832-3443-008, and the FAA provides www.raimprediction.net.
- For GPS-4000S (WAAS) installations, the operator/pilot need not confirm RAIM availability if WAAS coverage is confirmed to be available along the entire route of flight.
- The FMS must be receiving useable GNSS signals.

The FMS is not receiving useable GNSS signals if the FMS displays any of the following CDU messages:

- “NO GPS RAIM”
- “GPS NOT AVAILABLE”
- “GPS-FMS DISAGREE”

The AMS-850 does not meet the requirements of AC 90-100A because the AMS-850 does not store routes, DPs, or STARs in its electronic database.

This notification from Rockwell Collins does not constitute an operational approval. Operators should use the guidance in AC 90-100A to determine their eligibility for these U.S. RNAV Routes, DPs, and STARs.

If you have questions regarding this operator bulletin, please contact you local Rockwell Collins Customer Service Engineer or call Rockwell Collins FMS Technical Support at 319.295.5000.