

Attachment 5

**Operations Group Chairman's
Factual Report**

DCA05MA003

FMS Limitations



SYSTEM LIMITATIONS

The terrain database, terrain displays, and alerting system do not account for man-made obstructions except for all known man-made obstructions in Canada, the United States, and Mexico.

Aircraft navigation must not be predicated upon the use of the terrain display.

To avoid giving unwanted alerts, the terrain awareness alerting and display functions must be inhibited by selecting the GRND PROX, TERRAIN switch to OFF when within 15 nm of takeoff, approach, and landing of an airport not contained in the EGPWS airport database.

TERRAIN AVOIDANCE MANEUVERING

The terrain display provides situational awareness only and may not provide the accuracy and/or fidelity upon which to solely base terrain avoidance maneuvering.

When an EGPWS alert, caution, or warning occurs, a standard GPWS escape maneuver must be initiated. Only vertical maneuvers are recommended unless operating in visual meteorological conditions (VMC) and/or the pilot determines, based upon all available information, that turning in addition to the vertical escape maneuver is the safest course of action.

GPS INOPERATIVE

With the GPS sensor inoperative, the GRND PROX, TERRAIN switch should be selected to OFF unless the FMS position has been updated within five (5) minutes prior to takeoff.

With the GPS sensor inoperative, the terrain awareness alerting and display system must be inhibited by selecting the GRND PROX, TERRAIN switch to OFF during OFE (local station pressure) operations.

NAVIGATION SYSTEM LIMITATIONS

FLIGHT MANAGEMENT SYSTEM

The flight management system (FMS) installation meets the requirements of JAA Temporary Guidance Leaflet No. 2, Rev. 1: AMJ 20X2-JAA *Guidance Material on Airworthiness Approval and Operational Criteria for Use of Navigation Systems in European Airspace Designate for Basic RNAV Operations*.

ILS, LOC, LOC-BC, LDA, SDF, and MLS approaches using the FMS are prohibited. The FMS does not provide automatic transition to the ILS.

The FMS is approved for use only during enroute, terminal, and non-precision approach phases of flight.

FMS thrust, range, and fuel management information is advisory only.



Editing of fuel quantity on the fuel management page is prohibited.

IFR enroute and terminal navigation is prohibited unless the pilot verifies the currency of the database and verifies waypoints for accuracy by reference to current publications.

Instrument approaches must be accomplished with instrument approach procedures that are retrieved from the FMS database. The FMS must incorporate the current update cycle. The pilot must verify approach waypoints for accuracy by reference to current publications.

The approach must not be continued past the final approach fix if an FMS "NO APPR" message is displayed on the PFD.

The FMS calculated thrust setting must not be used if the pressure altitude is greater than 36,000 feet.

GLOBAL POSITIONING SYSTEM

Other approved navigation equipment appropriate to the route of flight (enroute and terminal) must be installed and operating.

When an alternate airport is required by the applicable operating rules, the following conditions apply:

- The alternate aerodrome must be served by an approach based on other than GPS navigation.
- The airplane must have operational equipment capable of using that navigation aid.
- The required navigation aid must be operational.

The GPS may only be used for approach guidance if the reference coordinate data system for the instrument approach is WGS-84 or NAD-83.

NOTE

RNAV/GPS approaches require specific training events. These approaches must not be accepted prior to completion of training for that approach type.

INTEGRATED STANDBY INSTRUMENT (ISI)

Flight Operations

The ISI displays localizer and glideslope deviation when NAV 1 is tuned to a valid ILS frequency, even when on the backcourse. ISI ILS is valid for front course ILS only.