



## FLIGHT PLANNING – FMS INOP

If the aircraft FMS/GPS is inoperative, there are flight planning issues to consider.

**FLIGHT PLAN:** Using the ICAO Flight Plan, the aircraft equipment entry must be updated to indicate GPS is not available. With the FMS inoperative you will be restricted from flying any RNAV Departure Procedure, Enroute Q Routes, RNAV Arrival Procedures and RNAV Approaches.

Information listed and the format of ICAO flight plan entries have not reached all ARTCCs yet. The FAA has started implementation of **ERAM** (En Route Automation Modernization) but the implementation is not complete and many of the **ATC facilities still can only refer to FAA Form 7223-1 Flight Plan entries.**

/L FMS Installed

/W FMS & GPS MEL'd

It may be necessary to alert clearance delivery and ATC enroute controllers of your navigation status as “*Slant Whiskey*” as they may not have the proper equipment codes on your flight strip.

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		(FAA USE ONLY) <input type="checkbox"/> PILOT BRIEFING <input type="checkbox"/> VNR			TIME STARTED	SPECIALIST INITIALS	
FLIGHT PLAN		<input type="checkbox"/> STOPOVER					
1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE / SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME		7. CRUISING ALTITUDE
VFR		/L	KTS		PROPOSED (Z)	ACTUAL (Z)	
IFR							
DVFR							

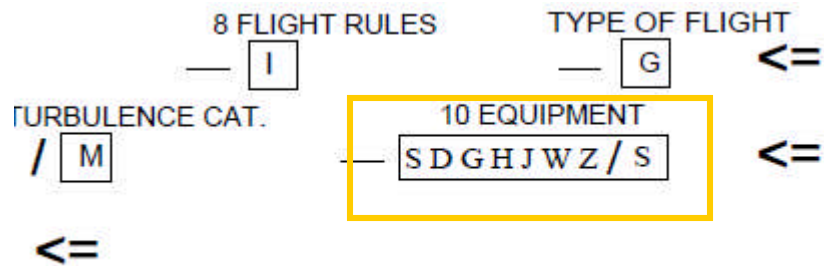
## NAV DATABASE

When the FMS is inoperative, the Nav Database is normally unavailable. The data base provides information for operation of the EGPWS/TASW. Ensure you review the procedures listed in the MEL for EGPWS/TAWS unavailability.

## REMARKS

The remarks section may have an entry “**STS/NONRNP10**”. This does not indicate that the FMS/GPS is inoperative. See the information below explaining NONRNP10.

**NAV/RNVD1E2A1** Check to ensure this entry is NOT listed in the Remarks Section of the ICAO flight plan. This notation indicates the aircraft has the navigation equipment for RNAV Departures, Enroute and Arrivals.



Omit the “G” in the Equipment List when the FMS/GPS is unavailable

**Item 10:** S D G H J W Z / S

S Standard, i.e. VHF, ADF, VOR, ILS (if one is MEL'd all others may need to be listed out)

D DME

G GPS

H HF

J Data Link (file DAT/V in item 18 too)

W RVSM

Z Other Equipment carried (will be listed in item 18. Such as, NAV/RNP10 RNAV1D1E2)

/ S Transponder Mode S with both pressure-altitude and aircraft ID transmission.

**Item 15** Cruising Speed (TAS) N knots, M mach, K Kilometers per hour. Level can be F flight level in 100 feet, A altitude in 100 feet, M meters altitude in 10 meters, S Standard metric level in 10 meters.

**Item 18** Other:

**STS/NONRNP10** Non-RNP 10 Operators Must Insert “STS/NONRNP10”

**DAT/V** Data Link Through VHF (*This is AFIS*)

NAV/RNVD1E2A1

(Capable of RNAV *Departures* (D1), RNAV *Enroute* (E2), RNAV *Arrivals* (A1).

EET/ABCD1234 EFGH 5678 ADIZ4321 (Dispatch will file this as necessary)



## STS/NONRNP10

**RNP 10** supports reduced lateral and longitudinal separation minima and enhanced operational efficiency in oceanic and remote areas where the availability of nav aids is limited.

### Provisions for Accommodation of NonRNP10 Aircraft (Aircraft Not Authorized RNP 10 or RNP 4).

Operators of NonRNP10 aircraft shall follow the practices detailed in 4a and 4b below.

a. Operators of NonRNP10 aircraft shall annotate ICAO flight plan Item 18 as follows: **“STS/NONRNP10”** (no space between letters and numbers).

b. Pilots of NonRNP10 aircraft that are flight planned to operate or are operating on **WATRS Plus “L” and “M” routes** shall report the lack of authorization by stating **“Negative RNP 10”** in the:

- Atlantic portion of the Miami Oceanic CTA
- New York Oceanic CTA/FIR
- New York Atlantic High Offshore Airspace
- San Juan CTA/FIR
  - on initial call to ATC and...
  - in read back of clearance to descend from FL 410 and above.  
(See paragraph 4e below).
  - if approval status is requested by the controller.  
(See paragraph 8h below).

c. Operators of NonRNP10 aircraft shall **not** annotate ICAO flight plan Item 18 (Other Information) with “NAV/RNP10” or “NAV/RNP4”, as shown in paragraph 7, if they have **not** obtained RNP 10 or RNP 4 authorization.

d. NonRNP10 operators/aircraft are able to file most WATRS Plus routes at any altitude. Some routes, however, may require special routing for NonRNP 10 aircraft. Check the WATRS Plus Webpage for related FAA Notices. NonRNP 10 operators are cleared to operate on preferred routes and altitudes as traffic permits. Aircraft that are authorized RNP 10 or RNP 4, however, will have a better opportunity of obtaining their preferred altitude and route because the 50 NM lateral separation standard is applied to those aircraft. 50 NM lateral separation is not applied to NonRNP10 aircraft.

e. NonRNP10 aircraft retain the option of climbing to operate at altitudes above those where traffic is most dense (i.e., at/above FL 410). To minimize the chance of conflict with aircraft on adjacent routes, NonRNP10 aircraft should plan on completing their climb to or descent from higher FLs within radar coverage.

f. All aircraft can enhance their opportunity to be cleared on their preferred route and altitude if they operate at non-peak hours, approximately 0100 to 1100 UTC.

**ERAM** (En Route Automation Modernization) is an FAA program designed to "allow faster processing of route requests and in flight route changes".

The En Route Automation Modernization (ERAM) system architecture replaces the En Route Host computer system and its backup. ERAM provides all of today's functionality and:

- Adds new capabilities needed to support the evolution of US National Airspace System
- Improves information security and streamlines traffic flow at US international borders
- Processes flight radar data
- Provides communications support
- Generates display data to air traffic controllers
- The display system provides real-time electronic aeronautical information and efficient data management.
- Provides a fully functional backup system, precluding the need to restrict operations in the event of a primary failure
- The backup system provides the National Transportation Safety Board-recommended safety alerts, altitude warnings and conflict alerts.
- Improves surveillance by using a greater number and variety of surveillance sources

The open system architecture enables the use of future capabilities to efficiently handle traffic growth and ensure a more stable and supportable system.

## **IMPLEMENTATION**

The FAA will deploy ERAM at 20 Air Route Traffic Control Centers, the Williams J. Hughes Technical Center, and the FAA Academy.

Step 1: 2006 Replace the current En Route computer backup system with Enhanced Backup Surveillance.

Step 2: 2007 Provide controllers real-time electronic access to weather data, aeronautical data, air traffic control procedures documents, Notices to Airmen, pilot reports, and other information with the En Route Information Display System.

Step 3: 2009 Replace the current En Route Host computer air traffic control with a fully redundant, state of the art system that enables new capabilities and requires no stand-alone backup system.