
Subject: RNP-4

Background Information

In certain oceanic regions, reduced ATC separation standards provide a navigation performance standard of RNP-4. While no airspace requires RNP-4 capability, ATC will tactically apply the reduced separation standard (30nm) between compliant aircraft. Delta has obtained operational authorization for the B747-400 to operate in RNP-4 airspace, providing more efficient use of airspace, optimum routings, reduced delays, increased flexibility, and reduced costs.

The following procedure is effective upon receipt.

Operating Procedure

Preflight

Referencing current aircraft MCOs, dispatchers will file the lowest RNP value - RNP-4 in most cases - for all flights operating in oceanic airspace. L1 denotes RNP-4 capability.



```
(FPL-DAL630-IS  
-B744/H-SDE2E3FGHIJ3J7M3RWXYZ/SLB1D1  
-RPLL2230  
-N0496F370 DCT MIA B462 CAB N884 ALBAX Y533 AZAMA Y579 ONC  
B597 ALC Y53 MADOG M750 IMPAL Y755 CARDS DCT  
-RJGG0315 RJOO  
-PBN/A1B1CD1L101 REG N676NW  
EET/RJJJ0056  
SEL/HKAC  
RMK TCAS AGAC EQUIPPED
```

PBN codes can be found in FOM, Chapter 5.

If dispatched with any inoperative navigation or communication equipment crews should reference the RNAV Minimum Requirements table in the MDM, Navigation Equipment section to determine its effect on RNP-4 operations.

Enroute

RNP-4 Oceanic Control Areas (OCAs) will be identified on the High Altitude Enroute Charts. The FMC automatically defaults to RNP 4.0. Enroute, if any navigation or communication equipment becomes inoperative, crews should reference the RNAV Enroute Equipment Requirement chart (next page) to determine its affect on RNP-4 operations. Notify ATC if a failure of any required navigation or communication equipment occurs prior to, or while flying in, RNP-4 airspace or if unable to maintain the required navigation performance. As mentioned above, if an aircraft is not RNP-4 compliant, it can enter the associated OCAs, but may be restricted from the most efficient routings and altitudes due to increased lateral separation requirements. Emergency/Contingency procedures for operations in RNP-4 airspace or on RNP-4 routes are the same as normal pilot procedures for in-flight contingencies, weather deviations, or SLOP in oceanic airspace.

RNAV Enroute Equipment Requirements (Not for Dispatch)

Equipment Required	RNP-4 Enroute	RNAV Enroute
Internal Reference Units (IRU)	2	1
AFDS FMA	1	0
Global Positioning System (GPS)	2	1
Autopilot Systems	1	1
Autothrottle System	0	0
Control Display Unit	2	2
EGPWS	0	0
EGPWS (Terrain Display Function)	0	0
Flight Director Displays	1	1
FMC	2	1
EICAS	1	1
ND	1	1
PFD	1	1
Radio Altimeter	0	0
TO/GA switches	0	0
Automatic Dependent Surveillance	1	0
ACARS	1	0
Flight Deck Communications System (Datalink) CPDLC	1	0
Satellite Communication Systems (SATCOM)	1	0

This chart is used for enroute requirements only. For dispatch requirements, refer to the RNAV Minimum Requirements table in the MDM, Navigation Equipment section.

Summary

RNP-4 authorization allows Delta to file and fly the most efficient routings and altitudes in the associated OCAs. Crew procedures for RNP-4 are the same as other OCAs. The major crew requirements include: awareness of RNP-4 airspace, compliance with navigation performance, and ATC notification of required navigation or communication equipment failure affecting RNP-4.

Approved By:

Pat Dever
747-400 Fleet Captain
pat.w.dever@delta.com
(404) 715-0313

Steve Hanlon
747-400 CLCP
steven.j.hanlon@delta.com
(404) 715-0308

Michael Mannino
747-400 Technical Manager
michael.mannino@delta.com
(404) 715-0320