
Subject: Procedures for NAT and Significant Route Changes for FMS Data Link Equipped Aircraft

Background

This bulletin describes the procedures to follow in the event of a track or significant route change. Notify the dispatcher so that the new routing can be input into the Flight Planning System (FPS). Once the crew is notified that this has been accomplished the crew can update the FMS via data link. Upon notification, the routing can be synchronized with the Flight Planning System (FPS) computer and allows crews to update the FMS via data link. This procedure is also available in an abbreviated format on the Metric Altimetry & Contingency Guide, which can be printed from the 757/767 home page. The revised guides will be placed on aircraft in September.

Currently, crews manage track or significant route changes by manually inputting new waypoints into the FMS. Manual entry of complex clearances can lead to human error and clearance deviations. The upcoming introduction of half-latitude waypoints in North Atlantic airspace increases the potential for track change input errors. Newly designed procedures using data link technology will reduce the possibility of human error when receiving significant route changes.

Note: The FOM defines significant as any lateral change 100 nm or more from the current flight planned route.

General

New Terminology

ACARS 22 - An abbreviated ACARS flight plan that includes all pertinent HOWGOZIT data including ETP information. Unlike the complete HOWGOZIT, the ACARS 22 is compact and contains only DAL POSN waypoints.

IFR (In Flight Revision) - Term used by dispatchers for new FPS releases created after departure. An IFR re-computes the flight plan with current aircraft data using the latest winds, provides revised ETP data (if required), and establishes appropriate DAL POSN reporting points. This process typically takes less than 10 minutes.

Overview

Oceanic track and significant route changes should be communicated to the dispatcher. The dispatcher can then accomplish an IFR.

When the dispatcher completes the IFR an ACARS 22 message is uplinked to the flight. Receipt of the ACARS 22 message confirms the IFR is complete and data link can be used to uplink the new route and winds directly into the FMS. The new FMS route requires a reload of wind data and a WPR RESET to enable automatic company reporting at the DAL POSN waypoints.

Procedures

(Must be accomplished in order)

Route Change via CPDLC

- Select LOAD prompt to load clearance into the FMS and Review.
 - [Cleared Route Clearance] message means flight cleared via uplinked route
 - [Cleared Route Clearance] does not mean cleared as filed
 - Both Crewmembers should carefully review the uplinked Route and compare it to the flight plan
- Select ACCEPT or REJECT based on whether clearance is acceptable.
 - If the clearance is unacceptable revert to voice clearance procedures
- EXECUTE if clearance acceptable.

Continue with the following procedures:

Route Change via ACARS or Voice, or Continuation of CPDLC Clearance

- Notify the Dispatcher of new routing to include:
 - ETA and fuel estimate for the appropriate forward waypoint
 - Expected altitude
 - Fuel temp
 - Cost Index and/or Mach assignment (if applicable)
- Once FPS 2.0 has been updated the Dispatcher will send an ACARS 22 message.

Note: FMS Reset is not required prior to requesting the new data.

- Non-CPDLC clearance only: Use the ROUTE REQUEST key on RTE Page 1 to uplink new route. ETP data, if required, will uplink in conjunction with the route request.
 - Select LOAD and review routing. If new route is acceptable, select EXECUTE. If new route is unacceptable, select ERASE.
- Arrival and Approach information must be reentered into the FMS.

Note: Executing a route request will erase all previous route fixes and replace it with the uplinked route which commences at the forward waypoint sent to Dispatch via ACARS. Crews must reenter any routing pertaining to the current ATC clearance in order to prevent a lateral clearance error from occurring.

- Use the WIND DATA REQUEST on the RTE DATA page to uplink new winds.
- Perform a WPR RESET to assure company position reports will be properly transmitted.
- Perform all Class II Off Airways procedures (as necessary) to include:
 - PM verifying waypoint coordinates
 - PF and PM verification of oceanic clearance
- Update Orientation Chart (as necessary).
- **CONFIRM ROUTING WITH ATC AT TRACK EXIT**

A printed copy of the ACARS 22 message may be used as the new HOWGOZIT instead of manually updating the original flight plan with the new fix information. Example:

DAL0179 AMS-PDX 13:08Z
REDISP FROM
7230N08000W
ALTN SEA CI 89
FUEL TIME/BURN
BURN 7:02/ 74545
ALTN :33/ 5894
10 PCT :13/ 2077
RESV* :30/ 5223
CONT :34/ 4961
MIN FUEL 87739
BLK FUEL * 92700 *
ON 18155 FMS 13194
DLA FUEL :33/ 4961

DAL0179 AMS-PDX 13:08Z
7230N08000W..
7030N09000W..67N100W..
NADEB.NCAN.LIBUG..
57N115W..YZU.J527.TNT.
J503.SEA.HELNS4.KPDX

FIX	PLND	PFL	PFR
7230N08000W		1446Z	65.3 +1/+7
	1445	340	64.6
7030N09000W			
	1515	340	58.9
67N100W			
	1554	340	51.6
NADEB		1636*	340 43.9
LIBUG	*1711*	360	37.7
57N115W			
		1732	370 34.1
YZU		1755	370 30.2
YNY	*1827*	380	24.9
YDC		1840	380 22.8
DIABO		1845	380 21.9
KPDX		1923	18.2

DATL0179 AMS-PDX 13:08Z
ETP/ETOP INFO
YFB/CYFB - YEG/CYEG
ETP N6558.2 W10216.0
ETP 2:17 FL179 NO ICE
ETP FUEL RORD 3339

Note: Crewmembers should be prepared to manually enter new routing and/or winds into the FMS if data fails to uplink. Manually entered data should be verified by all crewmembers.

Summary

These procedures will allow crews to update the FMS via data link and help reduce human error. An abbreviated procedure will be included on the Metric Altimetry & Contingency Guide and incorporated into the Vol 1.

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