FAA – Flight Plan Filing

Acknowledgement and Rejection Response Messages



Background Flight Planning Response Messages

- The US first implemented Acknowledgement Messages to Flight Plans (FPL) in 2005 and was based in the Enroute Automation System (ERAS).
- The ERAS was resident in the 20 Domestic En Route ARTCCs and the capability was ported to the ERAM systems when they replaced the HOST
 - The capability provided responses to filers on filed flight plans and subsequent flight plan modifications
- Response messages consist of Acceptance = "ACK" or Rejection
 = "REJ" messages being sent to the adapted filer.

Flight Planning Response Messages

Benefits include:

- Assurance to filers of flight plan on file
- Feedback to assist filers in correcting errors
- Incentivizes proper format and current routes
- Reduced workload on controllers because there is a flight plan on file
- Allows adapting secondary address for the response message
- Responses can be sent to multiple addresses

Note: NAM ICD message errors logical response messages (LRM) relate to <u>active</u> aircraft messaging between facilities. The Flight Planning Response Messages described in this briefing and in the FPRG refer to pre-active filing of plans by operators and filers.

FAA – ICAO Flight Planning Reference Guide

- This document provides
 references for filing International
 Civil Aviation Organization (ICAO)
 Filed Flight Plans (FPL) and
 associated flight planning
 messages for flights within United
 States domestic airspace.
- The information provided in this document augments instructions found in the ICAO Procedures for Air Navigation Services Air Traffic Management, Document 4444 (ICAO Doc. 4444), including Amendment 1 was effective 11/15/2012, and incorporated published supplementary requirements, instructions and guidelines for proper filing of FPLs with the Federal Aviation Administration's (FAA) En Route Automation System (ERAS).

En Route and Oceanic Services
Aeronautical Information and Flight Planning Enhancements

FAA ICAO Flight Planning Interface Reference Guide

Version 3.2



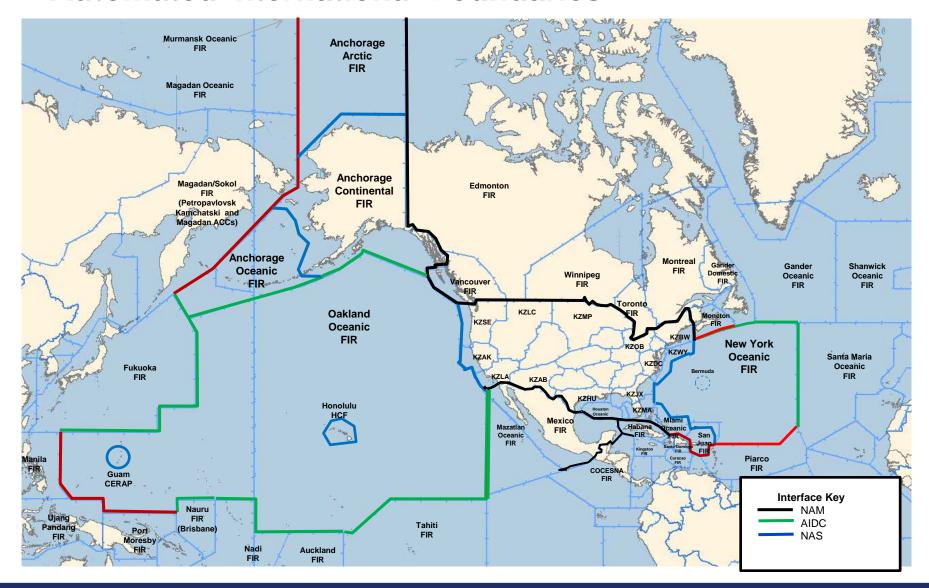
Federal Aviation Administration

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Air Traffic Organization En Route and Oceanic Services, ATO-E

Technical Performance Support Group, AJE- 36

Automated International Boundaries



Acceptance Messages

ACK Responses

- There are no ACK messages defined in ICAO Doc. 4444 that allow a receiving ATS unit to respond to flight planning messages.
- FAA has therefore defined ACK message responses, as outlined in FAA ICAO Flight Planning Interface Reference Guide (FPIRG) Table 3-6-1.
- Domestic En Route Automation Systems (ERAS) ERAM support use of ACK responses to FPL, CHG, DLA and CNL messages. If ERAS is able to process the FPL and determines there are no errors an ACK message will be provided in the following format:

ACK FPL/004 KZDC AWE603 KBWI 1230 KPHL



ACK Message Composition

Field	Element	Required/ Optional/ Prohibited	Examples
n/a	Message Type	Required	ACK
n/a	Single space character	Required	
03	(a) Message Type Designator (FPL, CNL, CHG, DLA) of the message being responded to	Required	FPL
03	(b) The FPF supplied Optional Message Number	Optional	/004
n/a	Receiving unit – Four letter identifier of the ARTCC generating the ACK	Required	-KZDC -KZOB
	Input message identification:		
07	(a) Aircraft Identification	Required	-AWE603
13	(a) Departure Aerodrome(b) Estimated Off-Block Time	Required	-KBWI1230
16	(a) Destination	Required	-KPHL

FPL ACK Example

Input from Jet Blue Airlines

-FF KZMAZZQA

010426 KJFKJBUH

(FPL-JBU2276-IS

- -A320/M-SDE3GHIM3WZ/SB1
- -TJSJ0730
- -N0462F340 DCT ACONY Y185 DONQU DCT LUCTI/M078F340 L454 OKUNU/M079F340 L454 WEBBB/N0455F340 L454 GEDIC DCT DPK/N0404F140 DPK3
- -KBDL0339
- -PBN/A1B1C1D1O1S2T1 NAV/RNVD1E2A1 SUR/260B DOF/190301 REG/N613JB EET/KZMA0028 KZWY0102 KZNY0243 KZBW0308 SEL/BDMP CODE/A7FAAD)
- Output to Jet Blue Airlines

ACK FPL KZMA JBU2276 TJSJ 0730 KBDL

CNL ACK Example

Input from Sao Paulo

FF KZMAZZQA 010003 SBGRYOYX (CNL-ACA091-SBGR2345-CYYZ-DOF/190228)

Output to Sao Paulo

ACK CNL KZMA ACA091 SBGR 2345 CYYZ

CHG ACK Example

Input from San Jose Costa Rica ATS Reporting Office

FF KZMAZZQA
010700 MROC ZPZX
(CHG-N111WB-MROC1130-KFXE-DOF/190301
-18/STS/MEDEVAC PBN/A1B2C2D2 NAV/RNAVA1D1 DOF/!(0301 EET/MUFH0126 KZMA0158 OPR/REVA INC. PER/C RMK/CUBA OVF 2131 NIC IAC 8410219)

Output to San Jose

ACK CHG KZMA N111WB MROC 1130 KFXE

DLA ACK Example

Input from Flight Plan Filing Service

FF KZMAZZQA 010129 KHOUUVAX (DLA-P4WWS-KIAD0145-SAEZ-DOF 190301

Output to Flight Plan Filing Service
 ACK DLA KZMA P4WWS KIAD 0145 SAEZ

Reject Messages

- There are no REJ messages defined in ICAO Doc. 4444 that allow a receiving ATS unit to respond to flight planning messages along with the general reason for the rejection
 - ERAM only sends the first error which triggers the rejection in the REJ message
- FAA has therefore defined REJ message responses, as outlined in FAA ICAO Flight Planning Interface Reference Guide Table 3-6-1
- If ERAS identifies errors in the processing of a message, a REJ message will be provided in the following format:

REJ FPL/015 KZDC Reason(Listed in Table 3-7-2 in the Flight Planning Interface Reference Guide)

REJ Message Composition

Field	Element	Required/ Optional/ Prohibited	Examples
n/a	Message Type	Required	REJ
n/a	Single space character	Required	
03	(a) Message Type Designator (FPL, CNL, CHG, DLA) of the message being responded to	Required	FPL
03	(b) The FPF supplied Optional Message Number	Optional	/004
n/a	Receiving unit – Four letter identifier of the ARTCC generating the ACK	Required	-KZDC -KZOB
n/a	Rejection reason	Required	See Table 3-7-2 Error Messages in ERAM
n/a	Input message identification:	Required	CNL-DAL1964-KDCA2125- KLGA (Entire input message)

FPL REJ Example

Input from Nassau Bahamas AFTN Office

FF KZMAZZQA

010013 MYNNYFYX

(FPL-SBM650-IS

- -SF34/M-SDF/S
- -MYNN1530
- -N0249A090 DCT
- -MYCB0040 MYNN
- Output to AFTN Office

REJ FPL KZMA EXACT DUPLICATE FP IN SYSTEM

CNL REJ Example

Input from American Airlines

FF KZMAZZQA 010002 KTULAALD (CNL-AAL1082-KMIA-MKJP-DOF/190208)

Output to American Airlines

FF KTULAALD 010002 KZCRZQZX REJ CNL KZMA NO FLT PLAN MNL COOR REQD CNL-AAL1082-KMIA-MKJP-DOF/190228

CHG REJ Example

Input from Managua Guatemala ATS Office

FF KZMAZZQA
010206 MGGTZPZX
(CHG-TAI588-MGGT0345-KMIA-DOF/19030
-15/N0469F370 UG765 RIDEM DCT IMATA DCT MAXIM DCT EADEN SURSO5)

Output to Managua ATS Office

REJ CHG KZMA MULT FLT PLANS MNL COOR REQD

DLA REJ Example

Input from Iberia Airlines

FF KZMAZZQA 010010 LEMDIBED DLA-IBE6454-SEQM0015-LEMD-DOF/190228

Output to Iberia Airlines

REJ DLA KZMA NO FLT PLAN MNL COOR REQD

Adaptation Overview

- Eight letter AFTN address must be adapted to receive responses from ERAM computer
- Multiple addresses may be adapted and receive responses for the same FPL and subsequent DLY, CNL and CHG messages
- Subsequent changes to an FPL must be received from original eight letter address
- Addresses adapted as capable of receiving response messages are maintained in a common database in all 20 US ARTCCs
- Adapted addresses may also be configured to receive a unique Computer Identification (CID) number for each flight plan

Harmonization is Goal

- Support for bilateral solutions and user collaboration needed to ensure automation compatibility as interface systems evolve
- Solutions must provide extensible compatibility with our North American and international neighbors
- Goal is to extend operational efficiencies through contiguous computer-to-computer coordination across country and system boundaries
- Direct benefit on our collective ability to integrate new technologies by providing 'automation buyback' for new controller tasks